THE BUILDER

A Journal for the Architect & Constructor

FEBRUARY 8, 1929 — No. 4488

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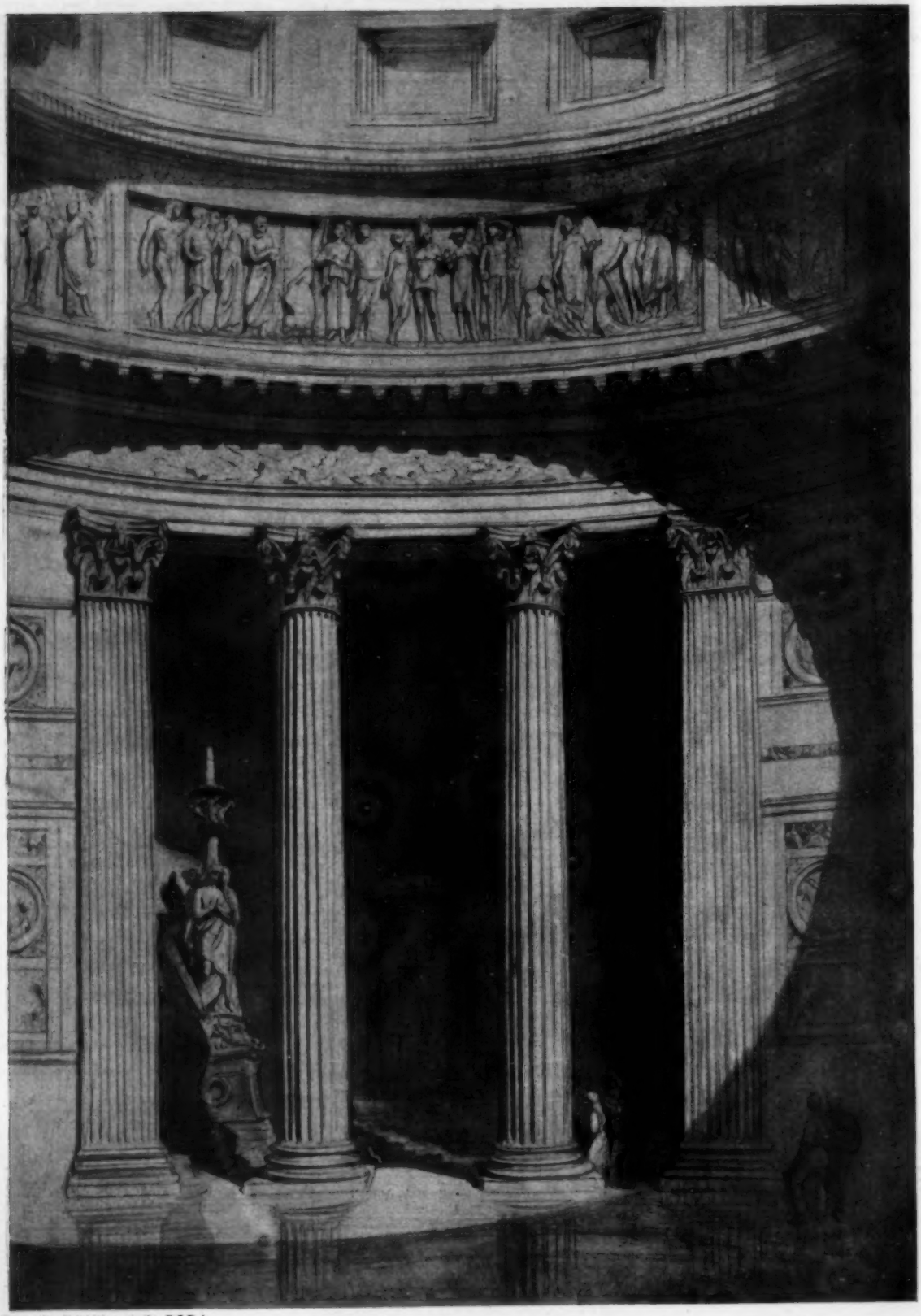
87TH YEAR



From the Exhibition at the R.I.B.A.

Interior of the Pantheon, Rome.

From a Drawing by Mr. Alfred C. Conrade.

THE BUILDER

A JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

VOL. CXXXVI. No. 4488. FEBRUARY 6, 1929

SIX MONTHS OF GOOD WORK.

THE process of devolution through which the Royal Institute of British Architects has been passing for some years has been made possible by the active co-operation of the Allied Societies, which, from being little more than so many isolated local bodies, have become integral parts of one great federal scheme. The value of these societies as a link between the Institute and the unattached practitioner has in itself been of great value to the unification movement; but even greater is the opportunity they give for the provincial voice to be heard and heeded at Conduit-street.

Very striking in this movement is the rise of the South Eastern Society of Architects, which has already become the strongest in membership of all the societies allied to the Institute. We are reminded by its Year Book, now before us, that little more than six months ago the wide area which this Society covers was quite devoid of any local organisation through which the country architect could have an effective voice in professional politics, or meet among his kind. That this state of affairs should have been so long suffered is probably due to a false assumption that any such organisation would have been redundant in an area within such easy distance of London, by road or train. At the inauguration of this Society we pointed out that this was an entirely false assumption, and that it was a need for expressing a class of practitioner whose conditions of practice were very different from those of his London brothers, and not a question of convenient travel, that made the formation of the Society so essential. We urged upon architects practising in the area that they should welcome this opportunity of bringing a local outlook upon national questions to make them more perfect in fulfilment, and of meeting their fellows in a mutual exchange of experiences. Events appear to have justified our expression of view, for already a membership of over six hundred tells its own story.

In most respects this Society follows the model of others that have existed throughout the country and Empire for many years, but there are a number of characteristics in which it sets, perhaps, a new model for the older societies to follow. The "Chapter" system may be not quite its own peculiar contrivance, but it seems to be carried to its logical conclusion in this Society, and we feel that it is an admirable system. It divides the area of the Society, which covers an otherwise unwieldy field of three counties, into a number of local sections, each centred round the larger towns of the area, and each with its complete local organisation, including committee, chairman and local secretary. Under such a system, matters of importance are thoroughly considered in committee before they come before a full Council meeting, where discussion can be the more readily confined to essentials. It also ensures that the views of any member can find an easy channel to headquarters and due consideration; and finally it fosters that spirit of good comradeship among architects of one locality that was unfortunately so little in evidence not so long ago.

We are particularly impressed with the Town Planning School of the Society, from which members may be trained by correspondence for the Town Planning Institute examinations. It is well known that the Minister of Health has urged local authorities to avail themselves of panels of experts to advise upon various matters affecting building and town planning. The qualified town planners, we know, are at present largely composed of public officials, whose judgment, excellent as it generally is, needs tempering at times with the wider outlook of the trained architect. It is asking much of our local authorities if they are to accept advice from architects who hold no specialist qualification in town planning over the heads of their own officials who may hold the necessary qualification and degree. A scheme such as this makes it possible for the architect in practice to become qualified as town planning experts, and so assist in a movement in which his particular outlook is so much needed. In his presidential address, printed in the Year Book, Mr. H. V. Lanchester lays special stress upon this important point of view. We believe that the South Eastern Society is the pioneer in establishing such a school in its area, and we feel sure that its lead might be followed with great advantage by as many of the other Allied Societies as possible.

Another worthy and valuable branch of this Society's activities is the establishment of design clubs in all the important centres it administers. At these the young pupils and assistants of a locality have the opportunity of working upon a programme common to the whole area, and of meeting once a month to see how their contemporaries have approached the same problem, and of hearing the criticisms of their elders in practice. We can imagine no finer way of combating that rather hopeless mediocrity that has pervaded some areas outside of London among the junior classes. In London it would be remarkable if any serious student neglected the many opportunities that are available for him to develop his talents during his evening hours. In the Provinces such opportunities are confined to the larger centres, and there is every excuse for the young student who finds it almost impossible to maintain that devoted interest in his profession that can alone produce the complete architect. There is nothing so encouraging to this spirit as competition and exchange of experience, and we really cannot have too much of it if we are to have a rising generation more promising than the present. Other Allied Societies have not neglected this good work, but in most cases the movement is not nearly enough extended, and more often than not confined to the principal headquarters' town of the Society. We commend this wide application of the devolution policy as applied to the training of students to many of the Allied Societies that have been in existence for many years, for it is not all the young men who have yet come to realise what an entrancing study this subject of architecture and design can be.

Looking through the list of members the reader must be struck by the number of well-known figures in the profession who have found themselves within the area of this very young Society. The latter is fortunate to have them within its ranks, and the former are fortunate to be so well served with a live organisation at their doors. We feel sure that under the mature wisdom of Mr. Lanchester's presidency, and upon the enthusiastic energy of its organising secretary, Mr. Goulburn Lovell, a great addition of strength to the parent Institute will be, and has already been, brought.

The Society has the advantage of living, so to speak, on the doorstep of the Institute, so that its affairs are perhaps more easily co-ordinated with those of the parent body than in the case of Societies further afield. There is no doubt that the fullest advantage will be taken of this boon, and that good work already begun will be carried through to a successful conclusion under favoured conditions.

We would like to congratulate the Society upon its admirable Year Book*, brought out, with a paradox that enthusiasm pardons, before it has completed a year of existence. But, then, paradox must be expected of a Society that is at once the youngest and biggest of the children of the Institute.

* The Year Book of the South Eastern Society of Architects, in alliance with the Royal Institute of British Architects. 1929. Eastbourne, Strange the Printer, Ltd., Baskerville Press.

NOTES

Mr. Conrade's Drawings.

THE large number of drawings in water-colour and oil of architectural subjects by Mr. A. C. Conrade, on view at the Institute Gallery, will afford much interest to architects and others. The refinement and skill with which architectural form and detail are rendered has hardly been surpassed. The subjects are largely of Renaissance work, but include both Classic and Gothic work. The range and treatment is wide enough, as, for instance, between the little seascape, 109, and the beautifully executed picture, 112, this latter being probably the most satisfactory drawing in the whole gallery: we publish this on our frontispiece. The fine drawing of the baldachino in St. Peter's, the corner of the Doge's Palace, the several fine altarpieces, and many interesting restorations testify to a great versatility and knowledge of architectural values. There are some one hundred and thirty drawings exhibited, and they speak eloquently of the artistry and industry of one of our best modern draughtsmen. A large number of drawings like these do not make the best sort of exhibition, for they are so full of detail that they compete with each other. If we ventured to criticise such excellent artistry it would be that the artist knows too much and does too much to obtain the breadth and impressiveness he might, though this does not apply to his fine drawing of the baldachino in St. Peter's and certain other subjects. It was a kindly courtesy on the part of the Institute to lend the gallery to Mr. Conrade, and we hope that a large number of architects and others will take the opportunity to see this unusual collection of architectural and other works. Mr. Conrade is extremely modest in the prices he has affixed to his drawings.

The Prix de Rome Work.

THE designs, drawings, paintings and sculptures on view at the Imperial Institute are disappointing. When we realise the amount of opportunity afforded for the development of artistic talent nowadays it is really surprising that so poor a standard is reached. The drawing shown in painting and engraving is much of it very crude, and there is a great lack of anything like imaginative quality. The one bright spot is the fine, capable drawing by R. J. Finny, who is awarded the Rome Scholarship for painting. The sculpture obtains no award. The architectural designs for a dining hall are largely founded on similar type, and neither in any freshness of idea or striking display of good proportion or telling emphasis is there anything to record. There are a number of creditable drawings shown, but they do not suggest a knowledge of the means by which distinction may be imparted to such a simple subject as this dining hall. We may be grateful for one thing at least, and that is that foolish freaks and eccentricities are tabooed amongst these selected designs, the authors of which have still an opportunity in their finished designs to give some reflection of the higher qualities of architecture for which the Prix de Rome was founded.

The Cost of Church Building.

A CLERGYMAN has been suggesting that the best way to provide additional church accommodation is to build smaller ones and in a cheap form. This suggests that the question of design and quality in church building is accounted of little importance. Whilst we should deprecate as much as would architects generally the prevalence of such an idea, we think it right to remember that some of the most pleasing building in the world has been done at comparatively low cost. At the same time the question, which is one partly for local consideration, is a difficult one when the prevailing costs are high, but where money is forthcoming it should be understood that the very best quality in design and workmanship is essential for a place of worship, and surely clergymen should be the last to lower the highest standard they can obtain. But we must not forget that there is all the difference between a poor district and a rich one, and the more restricted we are in cost the more important it is to employ an architect with a keen artistic vision.

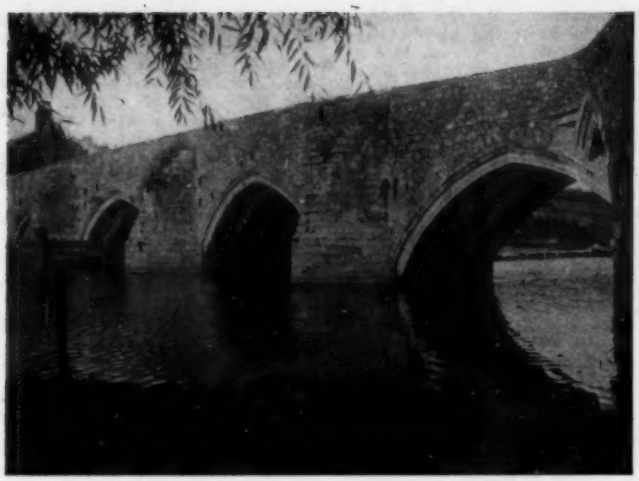
Bridges.

THE many illustrations of bridges at the Architectural Association give some idea of the great interest in the subject of bridge design. A permanent exhibition of this kind, so hung as to be fairly well studied would be of much value. As it is, the hanging and lighting of the subjects make the inspection neither very easy nor profitable. Some of the smaller exhibits have to be viewed from across a table, and such a large number of small exhibits cannot be fairly seen in such serried masses. A series of plates by Mr. Yerbury, a specially good selection of subjects lent by Messrs. Batsford, and an excellent series by Mr. E. Jervoise, are noticeable items in the show. The designs for a new Charing Cross Bridge, together with many examples of fine old bridges, are also shown. It is obvious from such numerous illustrations of our beautiful old road bridges how great a charm would be lost to the countryside if such beautiful old objects have to be cleared away to provide for the exigencies of modern traffic, with its heavy loads and high speeds.

From the Exhibition at the R.I.B.A.

The Erechtheion, Athens.

From a Drawing by MR. ALFRED C. CONRADE.



From the Exhibition of Bridges at the Architectural Association.

East Farleigh Bridge over the Medway, Kent.

Electric Masts. THE erection of electric masts, such as those on the South Downs, is causing some outcry, since, it is contended, they injure the landscape. Certainly, the landscape would be better without them, but is it not more important to concentrate upon objects of ill taste and vulgarity rather than on those which are unquestionably useful? These masts have at least the redeeming feature that they make no attempt to be, or to appear, other than what they really are. A structure of sheer engineering utility has a quality of its own, and we hardly like to contemplate the probable result if our authorities were to decide that the masts should become "artistic features." Purely efficient skeletons give the impression that power has to be carried across the region and the lack of self-consciousness with which this is done tends to minimise the damage to the scenery.

Standard Bungalows. A FAR heavier menace resides in the illustrations of standardised villas and bungalows that are sometimes shown to advertise "desirable residences" at fixed prices, or to be paid for by instalments. This is a really serious matter, and one wonders whether the R.I.B.A. or the C.P.R.E. might not take steps to bring to the notice of those concerned the fact that their designs are not creditable to them, and are injurious to the amenities of the countryside. It may be replied that it is not the business of these societies to criticise such work. But where badly designed and ugly bungalows are illustrated as being for sale, the damage done is comparable to that of exhibiting bad meat with the additional consideration that the public is better able to judge the merits of meat than of bungalows. The societies would be entirely within their rights in sending such criticisms, and it would be an excellent thing that offending persons should realise what expert opinion thinks of their efforts towards architecture. However much they might on the surface appear to resent it, it can hardly be doubted that they would feel uncomfortable and eventually mend their ways.

The Slum Problem. THE slum problem is again much to the fore, and there is every indication that for a number of years to come the building industry will be provided with plenty of work pulling down cottages in insanitary areas, and putting up alternative accommodation. During the last few days a number of dogmatic pronouncements on the slum question have been made in various quarters, but all the evidence suggests that this problem varies so much in different districts that generalisations are dangerous. For example, a special report of the Medical Officer of Health for Manchester indicates that Manchester still requires 15,000 houses, and that in addition 26,000 ought to be demolished. But it is stated that none of the former slum dwellers, who have been moved out to the new Corporation housing estates, have thought of returning to the old conditions of housing. But in Liverpool, on the other side of the county of Lancashire, a correspondent informs us "exactly the contrary is reported. Many families are finding it impossible to pay the rents of the Corporation houses. Accordingly they are flitting at night back to the slums from which they came.

Fireproof Paints. IT is astonishing that paints of this description, which are apparently not difficult or expensive to make, are not much more widely used on inflammable surfaces. It must be a mistake to paint match-boarding, for example, with a paint that would help a fire rather than hinder it. If such paints can only be made with matt surfaces this would constitute only a very slight drawback, since it would only be necessary to use fireproof paints where the material that was being treated was of a combustible nature. This would appear to offer a good opening to enterprising manufacturers.

Town Planning in Ireland. THE Irish Press has been devoting a good deal of space to this question. The *Irish Builder* tells us that it is known that Bills dealing with town planning and the preservation of ancient monuments have been discussed for a considerable time, "but there appears to be an unaccountable delay in passing them into law." The Garden Cities and Town Planning Association, after their visit to the Shannon Hydro-electric Scheme last summer, expressed their astonishment and concern that no steps were being taken to plan the Limerick area. The matter is of some moment to us in England, for whereas we can still make an easy escape to an unspoilt country near at hand, unless something is done, and done soon, Ireland will become an outer suburb of England, complete with bungalows, villas, and ribbon development.

From the Exhibition of Bridges at the Architectural Association

Uddenham Bridge over River Beult, one mile west of Smarden, Kent.

GENERAL NEWS

Professional Announcements.

The post of temporary architectural assistant to the Southall-Norwood U.D.C. has been awarded, out of 21 applicants, to Mr. Norman Fisher, of Pontefract.

Mr. Gilbert R. King, P.A.S.I., M.I.M. & Cy.E., has been appointed borough engineer and surveyor of Twickenham, in succession to Mr. F. W. Pearce, F.S.I.

Mr. H. Kent Atkins, P.A.S.I., A.M.I. Struct.E., Chartered Surveyor, has opened practice at 10, King's Bench-walk, Temple, E.C.4 (Telephone: Central 1705), and at 2, Talbot-road, Carshalton, Surrey (Telephone: Wallington 2347).

Mr. Cecil Masey, F.R.I.B.A., has removed to 15, Caroline-street, Bedford-square, W.C.1. Telephone: Museum 3896.

Shakespeare Memorial Theatre: A Contract.

The contract for the construction of the foundations of the proposed new Shakespeare Memorial Theatre, Stratford-on-Avon, has been awarded to Holliday & Greenwood, of London. The architects are Messrs. Scott, Chesterton & Shepherd.

Sound Absorbents.

Architects will be interested in an account, in a recent issue of the *Times*, of a method of sound proofing and sound absorbing, in which a substance known as "eel grass" is employed. This method is not unknown to readers of *The Builder*, a description of the soundproofing of a room by this material having been given in our issue for November 7, 1924.

Proposed Town Hall, Southampton.

By a majority of 987 votes on a 16,813 poll, Southampton has decided to promote a Bill in Parliament to proceed with the erection of a town hall and other buildings on the Marlands, at a cost of £250,000. It will be remembered that, as a result of a competition, Mr. E. Berry Webber, A.R.I.B.A., was appointed architect.

A Cambridgeshire Village College.

The Cambridgeshire County Council Education Committee recently passed the plans and estimates for the new village college at Sawston, Cambs. The committee were invited to accept the offer of an increase in the gift of land, which now amounts to just under four acres; the offer of free installation of electrical lighting and fittings at the village college; and a quantity of laboratory benches and other equipment from Newnham College for the teaching of general elementary science. The estimate of Messrs. R. & P. Cope Brothers, Duxford, for £13,062, was accepted. The plans have been prepared by the county architect (Mr. H. H. Dunn), in consultation with Mr. J. Shearer, the advisory architect nominated by the Carnegie Trustees.

Lincoln Cathedral Chapter House.

A large crack has appeared in Lincoln Cathedral Chapter House which the Dean attributes to the heavy motor traffic on the main road near the building. The discovery was made by Mr. R. S. Godfrey, Clerk of Works, who found he could see daylight between the flying buttress and the wall. Investigation showed that the crack was some 3 ft. long and nearly 2 in. wide, with signs of previous movement. The buttress, we learn, will have to be shored and underpinned, cramped to wall with delta metal and grouted.

South Wales Institute of Architects.

More than 100 guests attended a smoking concert held at the Dormie Café, Queen-street, Cardiff, on Thursday, January 31, under the auspices of the Central Branch of the South Wales Institute of Architects. An excellent musical programme was arranged by Mr. Fred Stibbs. Mr. Percy Thomas presided, and among those present were:—Mr. C. S. Thomas, of Swansea (the president of the South Wales branch), Mr. Ll. Smith, Mr. Ivor Jones, Mr. T. Alwyn Lloyd, Col. E. H. Fawckner, Mr. R. H. Winder, M.A., Mr. Harry Teather, Mr. W. F. Gibson (ex-president of the Cardiff Master Builders' Federation), Mr. I. J. Chorley, Mr. Pugh Jones (Glamorgan county architect), and Mr. W. S. Purchon, M.A. (hon. secretary).

British School at Athens: a New Director.

Mr. A. M. Woodward is retiring at the end of the present session from the Directorship of the British School at Athens, which he has held since 1923 and has made memorable by his excavations at Sparta. The previous excavations of the School at the Sanctuary of Artemis Orthia at Sparta will shortly be published by the Hellenic Society in a definitive volume.

Mr. H. G. G. Payne, research scholar of Christ Church, Oxford, has been appointed to succeed Mr. Woodward as Director.

Zoological Society's Estate, Eaton Bray: Proposed Development.

The Zoological Society of London are applying to Parliament during this session for powers to carry out works on their Whipsnade Estate at Eaton Bray, Bedfordshire, in connection with the formation of a large open zoological enclosure. The building and constructional works involved will be carried out under the supervision of the Society's architect and surveyor, Mr. E. Guy Dawber, F.R.I.B.A., 18, Maddox-street, London, W.1. The estate covers an area of approximately 480 acres.

Town Planning at Streatham.

The London County Council has received a report from the Town Planning Committee that the Minister of Health has approved the scheme embracing an area of about 20 acres in the neighbourhood of Streatham Common—the first of the Council's schemes to receive final approval. The scheme provides for:—

(1) A new street 45 ft. wide, which is designed to connect with a proposed street in the Croydon (North) Town Planning scheme on the other side of the county boundary giving through communication to Streatham Common;

(2) A small widening of Streatham Common South;

(3) The reservation of an area of about five acres to the south of "The Rookery" as a public open space, and the remainder for residential development;

(4) A general limit of density of development not exceeding 10 houses to the acre;

(5) A limit as regards buildings to a height not exceeding 30 ft., and not more than one-third of the plot to be occupied.

South-Eastern Architects' Year Book.

We have received a copy of the Year Book of the South-Eastern Society of Architects, of which Mr. H. V. Lanchester, V.-P.R.I.B.A., is president. We learn that the most important work of this Society is to develop the beautifying of our surroundings, and in this connection the Society has established a correspondence course of lectures to enable members to qualify at the Town Planning Institute Examinations for Associate Membership of the Institute. These lectures or papers will be supplemented by questions and criticisms covering the curriculum drawn up by the Institute.

The course is under the supervision of an influential honorary committee, composed of Mr. H. V. Lanchester (Chairman); Professor Abercrombie; Professor Stanley Adshead; Mr. Lindsay Millais Jopling, Barrister-at-Law; and Mr. Edward Willis, the President of the Town-Planning Institute. The chief instructor is Mr. J. M. Linton Bogle, M.C.; and the hon. secretary, Mr. R. Goulburn Lovell, St. Moritz, Upper-avenue, Eastbourne.

This Society—founded only in June of last year—already numbers more than 600 members, and there are already six Design Clubs, with more than 80 students. The Secretary is Mr. R. Goulburn Lovell.

COMPETITION NEWS

New School Hall, The Mount School, York.

The Committee of the Mount School, York, invite architects who are members of the Society of Friends or those who have at one time attended either Bootham School or the Mount School, York, to submit designs for a school hall. The last day for questions is March 1, and designs are to be sent in not later than April 24. The assessor is Mr. J. Mansell Jenkinson, A.R.I.B.A., and the conditions of the competition and plan of the site may be obtained on application to Dr. C. E. Hodgson, The Mount School, York.

Royal Society of Arts Competition of Industrial Designs.

Particulars of the Sixth Annual Open Competition of Industrial Designs to be held at the Imperial Institute, South Kensington, London, S.W., in June, have now been issued, and can be obtained from the Secretary of the Royal Society of Arts, John-street, Adelphi, London, W.C.2. Intending competitors must apply to the Secretary of the Society between May 1 and May 11 for the entry forms, and the last day for receiving entries is May 27. In all, scholarships and prizes amounting to over £2,000 are offered in connection with the 1929 competition. A prize of £50 is offered for designs for a Proscenium Wall of a Cinematograph Theatre; a prize of £20 for a set of Black and White Drawings of Architectural Subjects; and prizes of £25 and £10 for a Scheme for the complete Decoration and Furnishing of a Middle-class Bedroom. Three scholarships will also be awarded—one of £75 for designs suitable for Weaving or Printing intended for Dress or Furnishing Materials offered by the Tootal Broadhurst Lee Company; the Lewis Berger Scholarship of £60, open to apprentices, students, or craftsmen in the craft of painting and decorating, and the Art Congress Studentship of £50 for practising craftsmen or designers.

Valuable prizes ranging from £5 to £52 10s. are also offered as under:—

In the Architectural Decoration Section for designs for the decoration of Railway Compartments; for a metalwork scheme for the Vestibule and Main Entrance of a Town Hall; Fireplaces for Gas Fires; Stained Glass Window or Medallion; Leaded Lights for Departmental Store and City Restaurant; and an all-Tile and Faience Fireplace.

In the Furniture Section for designs for Dining-room Table, Chairs, and Sideboard; Office-desk Chair; Combination Mantels; the interior decoration of a Shoe Shop; Wireless Cabinet, Sideboard and Desk in Plywood; Panels for Baby Carriage; and Hat and Coat Hooks.

In the Pottery Section for finished specimens of an Original Decorated Design, and an example of Modelling in Fired Pottery, as well as a design for a Plaque for wall decoration; and in the Glass Section for designs for a modern form of table or pedestal illumination, etc.

Other prizes are offered for textiles, etc.

THE ART OF SUNNY SPAIN.

SIR BANISTER FLETCHER, F.S.A., F.R.I.B.A., on Wednesday, January 23, gave a lecture at the Central School of Arts and Crafts on Spanish Renaissance architecture. Views were shown on the screen to illustrate the buildings which, though dating long after the Moorish occupation of the mediæval period, yet still retained much of that feeling for delicacy and intricacy in design and workmanship which, said the lecturer, made Spain's architecture so fascinating. The brilliance of the sunlight and the national passionate temperament contributed to the exuberant richness of the style, as exemplified in the Casa de Ayuntamiento or Town Hall at Seville, the Alcazar at Toledo, and other fine buildings. The lecturer then described the Escurial, and concluded with a brief reference to the Baroque and modern architecture.

CORRESPONDENCE

[While we are glad to publish letters on professional and other matters of interest to our readers, it must be understood that we do not necessarily endorse the remarks of correspondents, who will oblige us if they will express their views as briefly as possible.]

The Haig Memorial Competition.

SIR,—I read with interest the suggestion in your Note in last week's issue that there should be further consideration, before the matter was decided, of the proposed form of limited competition for the Haig Memorial. It is much to be regretted that in the first instance the competition should not have been made available to the profession of sculpture as a whole. The very word "equestrian" conveys horrid suggestions to the mind, from the experience we have of these examples, and it does seem an opportunity for an endeavour to secure something less conventional and stereotyped than the usual "equestrian," as the "professional" likes to call it. This somewhat bureaucratic and high-handed way of settling the matter, without more consideration of the claims of sculptors, appears most unfair to those sculptors who are to be regarded as having equal claims to submit models with those selected. It is also the case that such a very limited form of competition being wholly unexpected, other sculptors than those selected, have been spending their time in making sketches, etc., in anticipation of being able to submit them.

I fail to see on what grounds the authorities concerned object to seeing the proposals of sculptors other than the three selected, and one wonders how it is that this power is held by officials in an affair the nation is paying for. Were it a private subscription only, the matter would be on another footing, but it seems very unfair in the case of a body of men who would naturally wish to compete in a memorial of such a national character. The nation's sculptors surely might rightly claim to submit their designs in the case of the nation's monument to Lord Haig.

This further aggression of bureaucracy is of no good augury, and it is much to be desired that the decision should be reconsidered. We do not know how far the Royal Society of British Sculptors can claim to represent British sculpture, but it represents them very badly if it does not take some action to influence a reconsideration of what has been arranged, for it has almost the appearance of throwing dust in our eyes with a mere pretence of a competition. My thanks are due to *The Builder* for calling attention to the matter, which it is to be hoped will lead to a better decision.

ARS.

London Building Acts (Amendment) Act, 1905. First Schedule.

SIR,—I have to inform you that the Council on January 22 passed the following resolution:—

That the Council in pursuance of the powers vested in it by the First Schedule (Part III.) to the London Building Acts (Amendment) Act, 1905, do approve as fire-resisting, floors and roofs constructed of solid reinforced concrete, without voids, subject to the following conditions:—

(i) That all materials used, the basis of design and the execution of all work shall be in accordance with the standards provided in the London County Council Reinforced Concrete Regulations to the satisfaction of the district surveyor;

(ii) That the thickness of the floor or roof shall be not less than 3 inches in any part and such thickness shall not include any plaster or cement screeding or paving;

(iii) That any reinforcing steel in slabs or supporting beams or ribs shall be protected from the action of fire by at least ¾ in. of concrete, exclusive of plaster;

(iv) That no wood fillets or any other combustible material shall be bedded in the thickness of concrete required to comply with any of these conditions; and

(v) That the clear unsupported span of slabs shall not exceed 18 in.

Provided that this approval shall not in any way derogate from any of the powers of the Council, and shall not in any way affect the requirements of (1) the London County Council (General Powers) Act, 1908, with regard to cubical extent of buildings; (2) the London County Council (General Powers) Act, 1909, with regard to the enclosure and encasing of steelwork; and (3) the regulations made under section 23 of the London County Council (General Powers) Act, 1909, with regard to the construction of buildings wholly or partly of reinforced concrete.

G. TOPHAM FORREST,
Superintending Architect, L.C.C.

Wood Fires.

SIR,—I was interested to read the extracts which you printed from Sir Robert Lorimer's letter to the *Times* on the subject of wood fires; but has he not made some error in his description of the ideal plan for a fireplace which is required to burn wood fuel? He says: "Make the plan of your fireplace opening triangular, that is, running to a point, or nearly so, at the back. An angle of about 180 deg. (that is, a square placed on the angle) suits well."

I may be wrong, but I think that the angle of the back of a triangular fireplace should be between 90 deg. and 140 deg. Perhaps I have misunderstood him entirely.

The arrangement of the wood in a fireplace with a triangular plan is very much less convenient than it is in a fireplace with a rectangular plan. It is always better, as well as more economical, if the wood is cut just the right length for the fireplace.

When the fireplace can be designed to draw, a rectangular plan with the back corners only cut off, it is, in my experience, certainly preferable.

BERTRAM C. G. SHORE (Captain).

Credit Finance.

SIR,—With reference to your remarks in your leading article for February 1 on those who "attribute every defect or evil to the capitalistic system," it may be noted there is a power beyond capital, namely, credit finance. Do any but Bolshevists point to the Soviet system as being a success? As far as one can judge, the financial system in Russia is orthodox.

There is another country where the orthodox system has been supplemented very successfully for many years past: I refer to the United States of America, where instalment selling is practised to an enormous extent—a system which recognises the existence of consumers and permits them to buy goods at under cost price, and a country where conditions certainly do not resemble "one single distressed area."

This system has one defect: it piles up a mountain of "debt" against the people of the U.S.A. This "debt" exists in book figures and is made possible by the creation of credits out of nothing by the people of the U.S.A. themselves—producers and consumers being one and the same—to the end that goods produced should be consumed. This "debt" is really no debt at all; the writings of C. H. Douglas, Messrs. Foster and Catchings, and others make this clear, and the idea that loan credit comes out of deposits or savings is incorrect, as Mr. McKenna has been pointing out for many years past.

Orthodox loan credit is *created* by the people of a country as producers in order to facilitate production; the same people as consumers, if they will, can also create credit or book figures to balance and extinguish those loans.

ARTHUR WELFORD.

"Connaught Court," Edgware Road, W.: Vestibule.

MESSRS. GEORGE LANSDOWN & BROWN, FF.R.I.B.A., Architects.

APPLIED CRAFTSMANSHIP—II.

By REGINALD HALLWARD.

CRAFTSMANSHIP is implied in a work of art, but art is not necessarily implied in craftsmanship, and there is much in the claims of craftsmanship to-day which will be surrendered as we recover this truth. Art comes out of life, and materials are secondary to it; if we exalt the latter as an end in themselves, and do not look beyond them, we may be dwelling in a materialism which exalts the means beyond the end, and like the elaborate resources of scientific and mechanical industry, surrenders value to profit. We are, in fact, really doing the same thing as the industrialist, and perhaps, knowing better, with less excuse.

For this reason it is not quite fair to set the virtues of the craftsman against the faults of the industrialist, who is also a very able craftsman in his own way, and we must look to individual example to help us on both sides; on the side of the arts, in fidelity to the aim of value above profit, never to sacrifice the former for immediate needs, or any lesser claim; on the side of the industrialist, the same fidelity to the creation of value and true usefulness, not sacrificing value for profit. For both are concerned equally with creating out of the frail materials of life something nearer to the divine; nearer to that delight and well-being which are the proper guerdon of life.

And as I am writing about craftsmanship I am anxious there should be no misunderstanding, that it is the least part of art that can be learned. The experience of others can and does aid, but it is our own first-hand experience on which we must mostly rely, and this is as much the case with gilding as with any other of the processes of handicraft. Gilding would appear a simple enough thing, but the niceties of method and timing, and a certain skill in the handling of the leaf are required for the best results. In starting out to gild a gesso relief, the first thing to be done is the polishing of the whole surface of the relief with fine pumice. This being thoroughly dusted off, a first coat of white polish is put right over the surface, two further coats being subsequently added. Twenty-four hours should elapse between each coat, when the surface should have become properly stopped for gilding. The white polish should be swiftly applied and not worked over too much, so that it is equally spread before beginning to set. The surface is then polished with French chalk, which makes it easier afterwards to apply the coat of japanner's gold size which follows, and should be left twenty-four hours before being again polished with French chalk. We now apply the coat of oil gold size on which the leaf is to be spread. The gold size should be timed for drying at not less than twenty-four hours, and the slower the drying the better. The brilliancy, permanency, and solidity of the gilding will depend largely on the right timing. My practice is to double-gild all the parts to be gilded, gilding first with fine aluminium leaf, and then gilding over it with the various sorts of gold leaf, from pale lemon to deep orange, as required. I may mention here that very effective gilding can be done with aluminium leaf only, much in the way some of the Russian and Eastern gilding is done. Delicious gold colour is obtained by glazing over it, and is, of course, much cheaper.

The gilding of the gesso relief being now completed, it is prepared for the after colouring by spreading over the surface of the metal a thin coat of parchment size, as colour will not lie on the gold itself. But care must be taken not to obscure with the colour the surface of the gilding, so only thin glazes are used. This method of colouring offers delicious possibilities for opalescent and elusive colour, as well as for the brightest tints. These tints are floated over quite thinly, and while still wet are wiped off again with soft rags, the hollows of the relief retaining naturally a little more of the colour than the surfaces. This is repeated until about the desired effect of colour has been reached; any additional emphasis can be added according to needs. The colour can hardly ever be satisfactory until wiped and dabbled and coaxed in this way. The way to remove the colour in the case of alterations, is to rub the surface with cotton-wool soaked in a little refined turpentine. The materials for painting are oil colours, diluted with fine turps, and a little japanner's gold size. Gesso will be found very useful in making models. We can, if the work is in the round, set up a sketch model on a rough wooden core, and it is adaptable also for relief for trial studies.

From what has been said it will be observed how simple and few are the requirements needed, which there is no need to exaggerate, or make any mystery of. Yet what results have been achieved down the ages with a few tools and materials when the end sought has been the right one. All the glories of sculpture, painting and handicraft, in their noblest interpretation, achieved through such relatively simple means. On the other hand, one cannot fail to be astonished at the complicated machinery, the vast achievements in scientific and mechanical ways, to produce the most ephemeral and even harmful and worthless things; all this mechanical invention exhibiting the strange anomaly that it is so often occupied on what is hardly worth doing.

Does there not seem some misunderstanding, or are our values wrong that we should employ all these multiplying mechanical resources and so much labour, for results so worthless in proportion to the effort made? Do we secure value, or adequate return for the disproportioned and implacable demands on human life? Or is there need for reconsideration, to think again as to its bearing on human welfare? The danger lies in burying these priceless human values, that are the wealth of sculpture, painting, and the arts under our vast mechanical resources. Human values are not different but under right conditions precisely and accurately the same. Or has avarice subordinated value to profit? Yet value in so many instances appears in a simpler outlook, of which we are reminded by the poet, who tells us that a few strong instincts and a few plain rules have wrought more for mankind, than all the pride of intellect and thought.

There is no doubt another side to all this, and that an important one, in which the resources of science and mechanical invention are seen to create value for us. But to make profit the only test of value is to dethrone human life, and yet this still underlies our outlook on economics. All this raises issues of such vast moment to the well-being of life as can hardly be touched on here. But just as there is something more than craftsmanship, so value is not necessarily implied in the supremacy of mechanical inventiveness, if what goes in at one end does not come out at the other; if the genius and study which creates it is then used so badly.

COLOURED GESSO RELIEF PANELS ON PULPIT IN ST. ALBAN'S CHURCH, TEDDINGTON. (The LATE A. H. SKIPWORTH, architect.)

DECORATIVE PLASTER-WORK IN GREAT BRITAIN.

IT has been quite evident of late that plasterwork is coming into its own again, that architects and connoisseurs generally are looking more and more to the moulded plaster decorations of early and late Renaissance days for inspiration in their treatment of walls and ceilings. This book may be merely the outward expression of an interest in fine things fleeting and sometimes past, but the author, in recording such things, whilst there is yet time, is doing a service to architects of the future.

The introduction gives an historical outline of the architectural changes affecting the design of domestic interiors from Henry VIII to the outbreak of the French Revolution. There are in this section thirty-eight illustrations which illuminate the text, dealing, biographically, with the various architects concerned in the great plastering efforts, and, descriptively, with their buildings. Chapters I to XII of the author's main section take us right through the various phases from Henry VIII, Edward VI, and Mary (1509-1588), to George III (1760 to the outbreak of the French Revolution). Chapter XIII finishes with notes on pargetry and repairs to old ceilings. The last-named homely and practical item should be invaluable to professional restorers.

In a book which, in the main, admittedly deals with the magnificent in an art which has never died out during the four centuries from its inception and has scarcely waned for three centuries, it is a happy thought that includes the humble parget work of the Eastern Counties. These are things which we may see from the roadside. Sparrow's House at Ipswich, and other houses and cottages at Clare (Suffolk), Saffron Walden, Newport, Audley End, and Wivenhoe (Essex), all show how gracious, under the gentle craft of the pargetter, the small house or cottage of the countryside or eastern country town could become. Old pargetry was, so to speak, a freehand drawing in plaster, not something to be made in a mould and then mechanically applied; it was as spontaneous as the Gothic carving in the village church. New pargetry is usually something thought out in the office, transferred from brain to paper, and from thence to the mould, and so on to the house front or gable, and in the process generally losing that sense of space and freedom arising from first-hand work in the open air.

In the illustrations we not only see such refinements as we naturally expect in the actual walls and ceilings associated with names such as Ware, Wyatt, Bonomi, Vanbrugh, Gibbs, Stuart, Kent, and Adam, but in the majority of cases where whole rooms are photographed, we get the furniture and other appointments which help to show them as living entities.

* By Laurence Turner, F.S.A., Hon. A.R.I.B.A., with an Introduction by Arthur T. Bolton, F.S.A., F.R.I.B.A. (Curator of Sir John Soane's Museum). (*Country Life*.) xxxviii. and 271 pp. Large folio. Cloth gilt. £2 2s. nett.

"THE BUILDER" DEBATE

XV.—ARCHITECTS AND THE ROYAL ACADEMY.

SIR,—The confidence felt by "Positive" that in changing the profession of the President of the Royal Academy from painter to architect the miracle will happen, leaves many other considerations out of account. For he assumes an importance to the Royal Academy many of us do not share. It is even noticeable that institutions sustain themselves long after the life has gone out of them. "Positive" accepts too much, and finds a remedy too easily. Institutions, the Academy among them, are rather on their trial to-day. Nor do we find their sanction in the number of years, and if changes are desirable, it is something more than a change in the profession of the President that is required. And what many of us feel as spectators of its activity is that the Academy exists chiefly to promote itself. It can hardly be said that in practice it is sustaining the arts, save for the accident of certain names within its ranks to whom professionalism less applies. For it is professionalism, that legacy of the Victorian period, that it fosters, holding but a fortuitous relation to anything better.

"Positive" tells us that all the arts share the confusion between the false and the true. But let us get closer up to it, and not bother about art, for it is the artist only who concerns us. When he tells us that with an architect for president the walls of the academical Jericho will fall down, is he so sure that under the compulsions of modern industrialism the best head and heart are only to be found in the architect? My business is not for a moment criticism of him, for it is not the profession, whether of architect, sculptor, or painter, but the man that matters, though on the face of it the painter and the sculptor, etc., are nearer to their work than the architect. But what of the R.I.B.A.?—for we shall naturally look in the home of architecture for those enlarged and ennobling influences which when presiding at the Academy will enable it to reach the promised land. The R.I.B.A. has at the present moment a scheme for its development which, happily accomplished, will achieve not only much larger premises but a larger income, while it will include everyone. By the touch of the Institute's magic wand we shall all be architects! I have noticed a detached and amused astonishment among the more thoughtful architects that anyone in his senses should suppose such a scheme could promote the art of architecture. The Royal Academy has not gone so far as this yet. "Positive" would, none the less, suggest that an architect for president is what the Royal Academy needs.

My object is to point out the error of determining the need from the profession instead of from the man. Men of right type are rare, but we have to find them. I do not think "Positive's" argument of any validity that the work of an architect can never be nonsense because it is a fact, when the fact oftentimes horrifies us. He fails to see that the choice of one profession over another will not help us, and with what truth can it be said to-day that architecture represents all the arts, seeing, apart from admirable but rare exceptions, the architect's enormous neglect of vital craftsmanship? But is the Royal Academy, therefore, in a better position, through its painters and sculptors, to guide the arts? Never mind about the original aim, so different in many ways from what it is to-day. Is its influence desirable, or does it actually withstand the best interests of art, keeping it at a low level? Such questions are being asked, and they are not easily answered. Many good artists do not regard the Academy as important, or much concerned in any special way to conserve the arts, which are better sustained through the fidelity and endowment of the artist himself. To those whose aims do not lie in the direction of professional advancement and the bestowal of titles the Academy will hardly appear important at all. Some of us have for long looked askance at the somewhat unedifying procedure which is often seen to accompany the pursuit of academical honours. Nor do I doubt but that in the circumstances of the time a man will be anxious to explain why he was elected to anything, and if unhappily in possession of a gold medal will be only too anxious to conceal the fact. As has been said, the annual Academy banquet is a day of humiliation to the arts.

"Positive's" acceptance of the Institution is too implicit. The artist should not depend on the Academy. He should look to himself. The former breeds a want of independence, and is more the result of his timidity than of his courage. I should always wish to preach this need for the artist to trust his own lite and its inspiration against the more worldly, narrow and accepted ambitions. If he is not strong enough for this he is not strong enough for the demands his art should make upon him. Let recognition come by making his work illustrious, not by seeking it too much. The Academy does not matter, and loyalties which reach no farther than it are no great asset to the country, because the Academy's relation to art has become merely fortuitous.

What, then, should we haxe in exchange for institutions that have failed us? I should be sorry if anything said here were really to weaken the Royal Academy or the R.I.B.A. I would rather strengthen them. I believe very little in change, but I would like to see them both so ordering their ways as to be more careful of the service they offer to so august a mistress as art, and to think more of the things that belong to her peace than of the worldly objects that so depress them.

Yet still more important is it that the artist, be he architect, painter, or other craftsman, trusting his own life and its inspiration, should direct it as these inform him, and not by the creeds of lesser men. So will his art become the inspiration and endowment of life, and the age be glorious.

I ought perhaps to add that there is much with which I can find agreement in what "Positive" has to say.

NEGATIVE.

MODERN CONTINENTAL ARCHITECTURE.

ON Saturday, January 26, Mr. F. R. Yerbury delivered the fourth of the series of non-technical lectures at the Architectural Association, Bedford-square, his subject being "Some Modern Buildings in Other Countries." The lecture was illustrated with a large number of lantern slides. The chair was occupied by Mr. Clough Williams-Ellis.

The lecturer said that if in a hundred years' time our descendants looked back and tried to get an idea of what was the dominating feature of our architecture in comparison with what had preceded it, the most outstanding fact would be that architecture to-day was the property of the people—not peculiarly of the Church, or the State, or of rich men. The people as a whole were interested in building, and in consequence, for the last ten years Europe had been experiencing a phenomenal revival of architecture. Ours was an age of democracy, its architecture was democratic, and the effect of this democratic leaning was shown in Holland more than anywhere else. Holland, after the war, like every other country, had experienced a grave housing difficulty, and had attacked the problem on lines rather similar to those adopted in this country—with rent restriction, Government grants for housing, and so on. In Amsterdam there had been appointed as Housing Director a Mr. Kepler, who was a strong Socialist, and a man with advanced ideas on architecture and art generally. Kepler had gathered around him some of the younger architects of Holland, men who had spent the barren years of the war speculating on the possibilities of architecture, and who now had the opportunity of putting their ideas into practice. These men gave the first sign of the revival of architecture in Holland, though they themselves would give the main credit to an older architect, Berlage, who in 1900 had built the Bourse in Amsterdam, which building was one of the first attempts to get away from the old conventional architecture. Especially noticeable amongst this little group of advanced men was de Klerk, a painter-sculptor-architect, who had been an errand boy until he was sixteen, and then had gone to an art school. De Klerk had been employed by the Amsterdam municipality to build great housing blocks.

A number of photographs of housing blocks by de Klerk were then shown on the screen. One of these was built in concrete, with stock bricks used chiefly as a decoration. Much of de Klerk's work, said the lecturer, seemed strange and bizarre. His architecture was like a nice drawing with all sorts of things in it that were not necessary for the building but were only added as ornament. But these buildings had an air of cheerfulness and jollity that was absent from many housing schemes in this country. All over Europe an architectural battle was going on between the romanticists and the utilitarians, and on the whole the latter were winning rapidly.

Some of the illustrations were of schools, of which, said the lecturer, more had been built in Holland since the war than in any other country. The Dutch schools treated the child rather as a human being than as a machine to be taught, and great care was taken to make the school a pleasant place.

One of the great influences on Dutch architecture, said the lecturer, had been the work of Mr. Frank Lloyd Wright, one of the few American architects who had not been content to copy things from the past, but had gone on lines of his own. Another architect who had influenced the Dutch very much was a Scotsman, Mr. Mackintosh.

Some slides that followed illustrating modern buildings in Vienna, in which city, the audience were told, practically all the building that had taken place since the war had been in some way connected with the municipality. The housing difficulty had been especially acute there, but had been attacked and solved. For working-class blocks of dwellings there had been provided all kinds of amenities; the best architects had designed them and the best sculptors had adorned them. The courtyards were finer than one would see in a block of flats in Park Lane; they were converted into gardens adorned with seats, pergolas, bathing pools for children, etc.

Illustrations of modern buildings from Germany followed. One block of flats shown was to house three families, and provision was made for each family to have a small garden of its own, one of these gardens being on the roof.

The theatre in Germany, said the lecturer, had received attention in a way we did not attempt here.

Finland, with its remarkable railway station at Helsingfors, Switzerland, France and Denmark followed. Denmark, said the lecturer, was a country that had cut out everything that suggested the romantic.

Of Sweden the lecturer showed many illustrations. This country had produced more fine architecture than any other. The Swedish architect was able to persuade his client to use the services of able painters and sculptors. In the office being put up in Stockholm for the Swedish Match Company there was a great courtyard with an enormous fountain by Caryl Milles, Sweden's finest sculptor. The Town Hall at Stockholm (also shown) was, said the lecturer, one of the finest buildings in Europe.

ENGLISH COMMERCIAL ARCHITECTURE—V.

By F. E. BENNETT, A.R.I.B.A.

THE BUSINESS HOUSES.

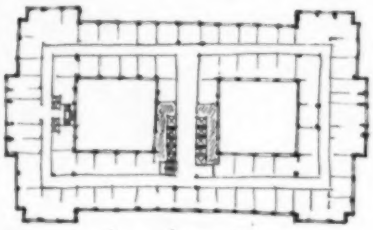
LONDON, like some other English cities, is not what it used to be. It is very much changed in recent years, particularly in the appearance of its City and West End arteries. Many familiar old buildings have been torn away to make room for the new large office structures, which have been found necessary to meet the growing demands of trade and commerce. But it cannot be said that this changed appearance is for the worse. We have lost many things; we have lost some architectural gems, some fine old inns and quaint Elizabethan houses, and we have lost our stucco Regent-street; but we have also lost our Clare Market slums and many another plague area. In the disappearance of our "gems" and the odd places we have known over a period of years and got to like, although they claimed no special architectural merit, we are apt to take on a harshly critical point of view of the new buildings. Huge office buildings have sprung up all over the city, and we have viewed them narrowly, finding every fault and feeling aggrieved because they exhibit a standard of excellence in design which is not as high as we should like it to be. Perhaps the standard on which we judge them is quite an unattainable one.

The time has come, it seems, when we can survey our practically transformed city and rise above acrimonious criticism dictated by a narrowed taste on a specialised idea, and can see its grandeur and rejoice in the fact of its deliverance from some of the architectural diseases which certain Continental towns have been made to suffer in recent years.

If in our minds we run quickly over the districts of most change—from the Port of London Authority building to London Bridge; up to the Bank; Leadenhall-street and around the City; Moorgate-street; Finsbury-circus; back to Cheapside and then over westward to Aldwych, Kingsway, and Southampton-row; the Strand, Piccadilly-circus, Regent-street, Oxford-street, and then over to Victoria—what do we see? How is the appearance of London, famed for its architectural dignity, now altered by the presence of the newcomers? There can be no doubt of the reply. Its magnificence is greatly increased and there is a widening and extending of London's proportions on lines which, if not always in themselves exactly perfect or quite harmonious, maintain nevertheless that character of solidity which has been its pride for many generations.

The significance of new work in London is not, perhaps, being fully realised owing to the recent spectacular developments of cities on the other side of the Atlantic. Under the more or less prosaic heading of "office buildings" the majority of the new buildings constitute a group which has acquired definite architectural characteristics. Designated "houses" by their owners, these buildings stand as the centres of trade control and administration and aim in their architectural magnificence to vie with the palaces of the early Renaissance. In Kingsway alone there are some dozen of these "houses" from the new Victoria House at the top to Bush House at the bottom.

Business in the old days was a more individual thing, and the fashionable conceits



THE ROYAL LIVER BUILDG.
DIAGRAM PLAN.

of the time found much reflection in the premises which contained a business firm. The spirit of the business and its architecture remained aristocratic and exclusive. To-day, the spirit is changed to one of breadth, efficiency, and economy, and one embracing in its democratic outlook something of the Roman spirit. There is a striving for simplicity and for an accentuation of pure proportion.

As a basis for architectural inspiration this spirit of efficiency and economy may have its shortcomings, but there is romance behind it. It is found there if we but dig beneath the covering crust which hides the feelings and prevents the superficial expression of emotions. What further ingredients go to make up the new character it is not appropriate to try to analyse. It has been said of Adelaide House that its appearance is as satisfying as a ship or motor-car and conveys a similar impression of efficiency, and that its great simplicity of design possesses a perfection of proportion which rescues it from any appearance of poverty. That is a keynote to much of the new work, although sometimes richness is left unsupported, due to a poverty of interesting proportions.

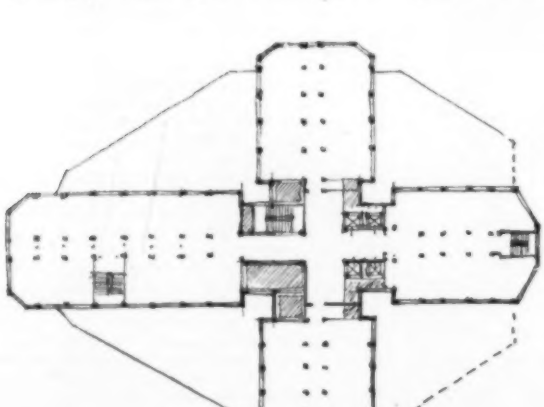
A comparsion between Britannic House and other "houses" is sometimes made, but the building stands alone outside the main stream as a superb essay in the super-Renaissance and an exhibition of the masterly handling of solids and voids. The offices of the Midland Bank in Cheapside—the elevation of which was designed by the same architect—come more into the general trend if they do not in some ways lead it. Here Classicism finds its place and there is a distinct flavour of Sanmichele, but the theme is not Classic. One feels there is a distinct break with the temple idea as applied to the business house. There is a seeking for freedom from long-established tradition in an endeavour to harmonise the modern requirements of increased height and larger window space.

Where the modern character often goes wrong is in wanting to be too grand. Attempts are made to gain the magnificence of temple and palace architecture without at the same time making sufficient sacrifice of ground space and window area to make the result convincing. One sees façades in Kingsway where monumental columns and piers, grand in themselves, fail to gain effect because glass and metal infillings, insufficiently recessed, prevent the casting of all but the meagrest shadows. Kingsway, with all its grandness, is apt to convey the idea of cardboard architecture. Kodak House is, of course, an exception, and Bush House comes into another category.

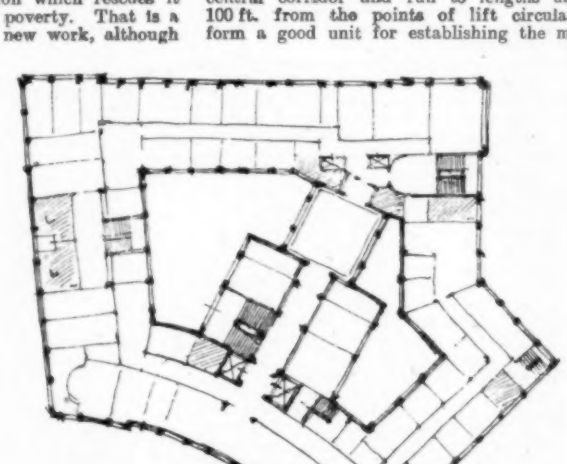
The question arises whether the old character for city buildings was not finer than the new and therefore one to be developed instead of neglected. It is not to be taken as a fact that the old was the finer, even if it is really possible to make a direct comparison between the two. Each has its particular character, the one much stronger, but the other not necessarily inferior because weak at present.

* * *

The problem of a design for an individual business house is one which can be dealt with in many of its stages by the light of certain main principles and accepted practices. Much information on American work comes to us through the medium of the professional Press, but the difference of conditions in that country make such information not of considerable immediate value. Our sites are rarely of sufficient regularity to permit the straight application of the 50 ft. wing unit, although in principle this is usually followed. Two offices of 20 ft. deep and 10 ft. or more high, backing on to a central corridor and run to lengths about 100 ft. from the points of lift circulation form a good unit for establishing the main



THE "UNDERGROUND" BLDG.
DIAGRAM PLAN



BRITANNIC HOUSE
DIAGRAM PLAN

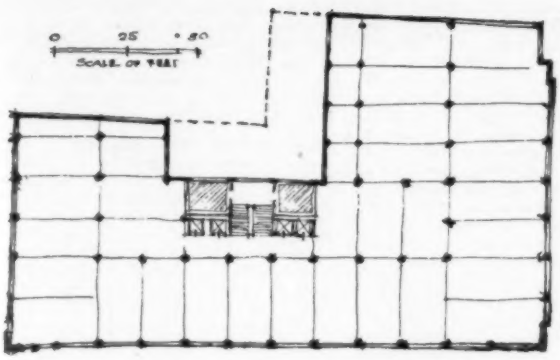


DIAGRAM PLAN
ADELAIDE HOUSE

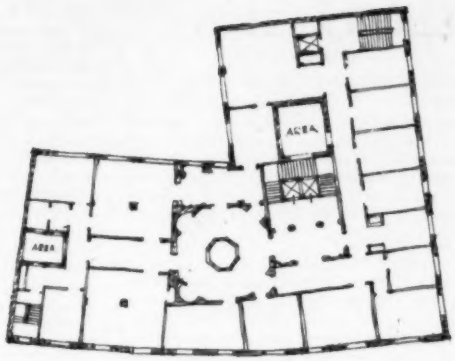


DIAGRAM PLAN
THE NEW "INDIA HOUSE"
0 25 50

disposition of the plan. Whether the corridor is used as such or the space run into one big office does not matter much. From the diagram plans it will be seen that while Adelaide House takes on the "unit wing" form, it is as broad as 80 ft. in one place. The sites both for Britannic House and the Royal Liver building have the form of a 50 ft. wing run all round with a connecting wing across the centre, while the "Underground" building has crossed wings contained in a pear-shaped site.

Fenestration, which has so important a bearing on the utility and external appearance of a business house, is generally dominated by the steelwork. With the stanchions spaced at 16 ft. centres the alternatives arise of having one squarish window per bay, a coupled window, two windows per bay at 8 ft. centres, or only one vertical window per bay. The first is convenient but ugly. The second is difficult to use but has been handled successfully in some instances, particularly in the Holt Building, Liverpool. The third allows of easy sub-division inside, but the closeness of the windows gives a domestic appearance. The fourth allows a clear domination of solid over void but does not provide sufficient daylight unless the floor height is great. Interesting essays have been made in the grouping together of large windows, but this arrangement is apt to destroy the quality of repose which is so necessary in a large building of this type.

With the general increase in height up to the maximum allowed by law, lifts have increased in number and importance, and the tendency is to place the stairway a little off the main centre of circulation where it may be used as a fire escape and for movement from one floor to another, but here it is not intended for major traffic. India House is to have the old form of stair-well with lifts running through its centre, but owing to the nature of this building there is likely to be more circulation on foot than in such a building as the "Underground" one, which consists more completely of working offices.

"Dark areas" on plan are now considered quite undesirable and are found to be uneconomical as they do not return sufficient rent.

Corridors tend to be designed on similar lines in the new business houses. Corridors can give a building considerable tone if some of the decoration of the main hall is carried in them to the upper floors. Marble wainscotings and floorings are finding popularity, and there are designs which incorporate harmonious colours, adequate artificial lighting, and devices to permit scrupulous cleanliness.

Height considerations have been the cause of much discussion, but there seems little likelihood of any increase beyond the 80 ft. cornice and two stories now allowed in London. Although the city is well filled out on plan, there is still plenty of room vertically, and opportunities to gain good daylight *above* sites which are otherwise greatly enclosed.

MEETINGS

SATURDAY, *February* 9.

A.A.S.T.A. Visit to Wimbledon and Sutton Railway. Meet at Sutton Station, 2.30 p.m.

Architectural Association. Hon. H. A. Pakington on "Good and Bad Architecture." 3 p.m.

MONDAY, *February* 11.

Institution of Sanitary Engineers. Mr. J. A. Formunt on "Subaqueous Tunnelling in Compressed Air." At Caxton Hall. 7.30.

Edinburgh Architectural Association. Associate Section. Mr. W. Lindsay on "Public Buildings of Scotland in Seventeenth and Eighteenth Centuries." 15, Rutland-square. 8 p.m.

Bartlett School of Architecture. Mr. F. E. Drury on "Fundamental Details of Construction for Steel-framed Buildings." 6.30 p.m.

TUESDAY, *February* 12.

Institution of Electrical Engineers. Mr. W. B. Woodhouse on "Overhead Electric Lines." Royal Technical College, Glasgow. 7.30 p.m.

University College. Miss E. J. Davis on "London Traffic." 8.15 p.m.

WEDNESDAY, *February* 13.

Institution of Heating and Ventilating Engineers. Annual General Meeting. Holborn Restaurant. 2.30. Dinner, 6.30.

Institution of Municipal and County Engineers. North Western District Meeting. Town Hall, Manchester. 6.30 p.m.

Institute of Fuel. Mr. W. F. Goodrich on "Fuel Economy and the small Steam User." At Chemical Society, Burlington House, W. 5 p.m

Central School of Arts and Crafts. Sir Banister Fletcher on "Famous Jacobean Mansions." 6 p.m.

Illuminating Engineering Society. Twentieth anniversary dinner. Trocadero Restaurant, W. 7.30 p.m.

Manchester Society of Architects. Mr. O. P. Milne on "Everyday Houses, English and Foreign."

St. Paul's Ecclesiological Society. Annual General Meeting. 7 p.m. Mr. A. E. Henderson on "Life and Art in the Near East." 8 p.m. At 9, Conduit-street, W.

Liverpool Architectural Society. "Honan Night." Bluecoat Chambers.

THURSDAY, *February* 14.

Bartlett School of Architecture. Professor P. Abercrombie on "Town and Country: a Contrast in Methods." 6 p.m.

Chiswick Polytechnic. Mr. W. H. Ansell on "Internal Woodwork and Fittings." 7.30 p.m.

Carpenters' Hall. Sir Frank Baines on "Ancient Castles and Abbeys." 8 p.m.

V. and A. Museum. Professor F. W. Hudig on "Delft Pottery." 5.30 p.m.

West Yorkshire Society of Architects. Students' Debate: "That Building is becoming a branch of Engineering rather than of Architecture." Leeds. 7 p.m.

South Wales Architects and Builders. Mr. Clough Williams-Ellis on "The Preservation of the Countryside." Engineers' Institute, Cardiff. 7 p.m.

Institution of Structural Engineers. Mr. A. C. Bossom on "Problem of the Skyscraper." 10, Upper Belgrave-street, S.W. 6.30 p.m.

Geffrye Museum. Mr. A. Stratton on "Tudor Houses." Kingsland-road, E.2. 7.30.

FRIDAY, *February* 15.

Institution of Structural Engineers. Western Counties Branch. Professor J. Husband on "Bridge Erection."

Architectural Craftsmen's Society, Glasgow. Mr. R. Taylor on "Granite and its Uses." At College Buildings. 7.45 p.m.

Institution of Structural Engineers. Midland Counties Branch. Annual Dinner. Midland Hotel, Birmingham.

OBITUARY.

Mr. H. G. Crothall.

We record with regret the death of Mr. Harry George Crothall, architect to the Middlesex County Council, who died at his home at Westcliff-on-Sea on Saturday at the age of 64. He began his career as an artist's plasterer, becoming a draughtsman in the architectural department of the London School Board. From there he went to the Middlesex County Council as chief architect of the education committee, in which capacity he was responsible for the building of hundreds of schools in the county. In 1919 he became the county architect. Up to a period shortly before his death he was engaged on the plans for the new £2,000,000 hospital and colony for mental defectives at Shenley, Herts, and was able nearly to complete them. Mr. Crothall was a Fellow of the Royal Institute of British Architects and a Freeman of London.

Mr. Charles Clarke.

We regret to record the death of Mr. Charles Clarke, joint managing director of Messrs. Waygood-Otis, Ltd., lift manufacturers. Mr. Clarke, who died suddenly on Thursday, January 31 last, from pneumonia, following influenza, was actively associated with the lift industry for over forty years, and his loss will be deeply felt by all who were associated with him. Deceased, who was in his 59th year, leaves a widow and two children.

ILLUSTRATIONS

PLATES

Wyggeston Grammar School for Boys, Leicester.

The award of the assessor in this competition, Sir Felix Clay, Bart., was given in our last issue. We illustrate this week the first and second premiated designs, by Mr. James Miller, A.R.S.A., F.R.I.B.A., and Messrs. A. Bailey and D. H. McMorran, respectively.

Lovell House, E.C.

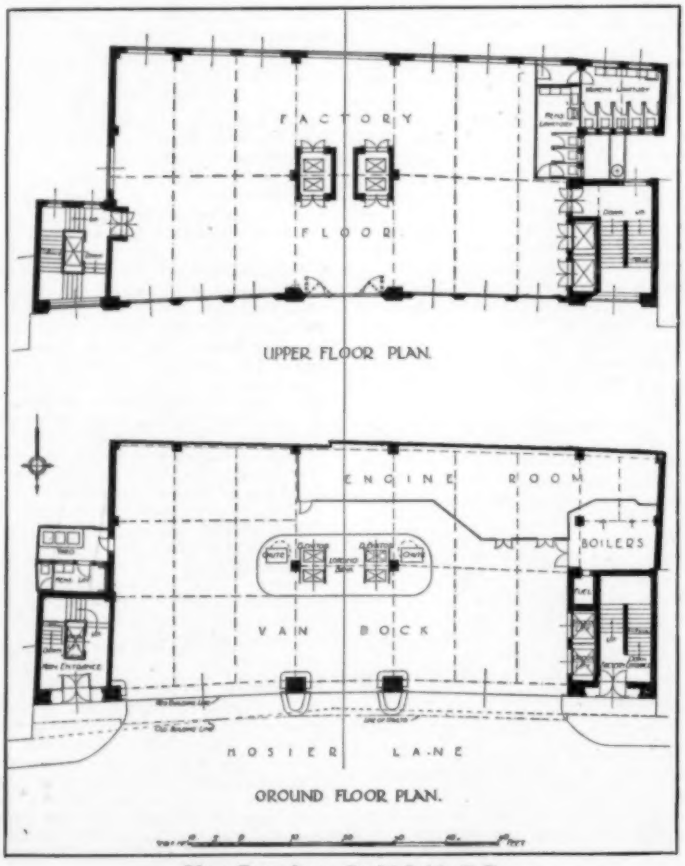
This modern business block, situated in Hosier-lane, West Smithfield, is being erected by Messrs. Lovell and Christmas, Ltd., for purposes of butter and cheese production, administrative accommodation and transport convenience. In addition, there is extensive cold storage accommodation. The ground floor consists principally of a van dock, with a centrally placed loading bank, on which elevators and chutes are erected. These are in direct communication with the cold storage accommodation in basement and sub-basement and the factory floors above. On the frontage there are large span openings for the biggest motor vehicles. At the north end of the building and adjoining the factory staircase there are two further goods lifts, giving service to all floors.

The internal walls are faced with glazed bricks and tiles, and the ceiling of the first floor is lined with "Sanalite," giving a bright and hygienic effect, which is accentuated by the absence of mouldings or corners throughout the building. The elevation to Hosier-lane is carried out in faience work, its vertical lines and large window areas expressing the purpose of the building. Three projecting and battered pylons have been introduced to emphasise the ends and centre and to give character and interest.

The architects are Mr. Arthur F. Usher, F.R.I.B.A., and Mr. Joseph Hill, F.R.I.B.A., of the firm of Yetts, Sturdy and Usher, 34, Gordon-square, W.C.1, and the general contractors are Messrs. Dove Bros., of Cloudesley-place, N.1. The machinery in connection with the cold storage work has been carried out by Messrs. J. and E. Hall, Ltd., of Dartford, and Messrs. Wallington, Jones, Ltd., of 13, Crutched Friars, E.C.3, were sub-contractors regarding the insulation of the chambers. The sub-contractors, working under the general building contract, were as follows:—Moreland, Hayne and Co., steelwork; Expanded Metal Co., floor reinforcement; Empire Stone Co., staircases; Ragusa Asphalte Co., asphalt; Hathern Station Brick Co., faience work; Leeds Fireclay Co., glazed bricks and wall tiles; W. B. Simpson and Co., "Sanalite" ceiling tiles; W. Shepherd and Co., floor tiles; The Crittall Manufacturing Co., metal windows, partitions and doors; Samuel Haskins Bros., steel shutters; Express Lift Co., lifts and metal enclosure; A. Sauvee and Co., elevators and chutes; The Bostwick Gate Co., collapsible gates and balustrades; Engineering Works, Ltd., electric lighting and power; Richard Crittall and Co., sprinklers; R. Whittington and Co., heating, hot water and steam plant; O'Brien, Thomas and Co., sanitary fittings; Yannedis and Co., bronze work and door furniture; Herbert Morris, Ltd., jib crane; Venesta, Ltd., lavatory partitions; Haywards, Ltd., copperlite glazing; Luxfer Prism Syndicate, Ltd., patent roof glazing; A. Goslett and Co., window glazing; F. Braby and Co., galvanised railings, enclosures, tanks, wire guards, etc.; Mayfair Decoration, decorations; F. Wise, demolition.

National Bank of India, Rangoon.

This building is of steel frame construction fitted with brick panels, hard plaster and reconstructed stone. It is planned with a view of avoiding columnar obstructions to the counter, and obtaining maximum public space. The ground floor is to be used for banking, the three upper floors for offices, and the top floor as living quarters for part of the staff. A special feature of the building will be the marble, bronze and glazed treatment of the banking hall. Mr. T. O. Foster, F.R.I.B.A., is the architect.



New Premises, Smithfield, E.C.

MESSRS. ARTHUR F. USHER and JOSEPH HILL, FF.R.I.B.A. (MESSRS. YETTS, STURDY & USHER, FF.R.I.B.A.), Architects.

Rangoon Port Trust Building.

Steel frame construction is used for this building, with brick panels and hard white plaster finish and re-constructed stone to the capitals of the columns, cornice, etc. An exceptional feature of the building is the introduction of colour by means of a novel method of sun protection consisting of honeycombed emerald green porcelain. This treatment, we are informed, has proved very successful, and we understand it is likely to be adopted in other buildings. Colour has also been used in the roundels between the arches, which are in enamelled terra cotta in various colours. Burmese woods have been used in the interior decoration, and the furniture of the board room and other offices has been designed by the architect to be in harmony with the whole conception. The architect is Mr. T. O. Foster, F.R.I.B.A.

"Connaught Court," Edgware-road, W.

"Connaught Court" comprises Nos. 45, 47 and 49, Edgware-road, and has been erected for Messrs. J. H. Kenyon, Ltd. It consists of ten flats above the ground floor, with entrance in Connaught-street, opening on to a hexagonal hall at the bottom of the staircase and lift. The greater portion of the ground floor is adapted for Messrs. Kenyon's offices, with a basement under. There is a separate shop and basement in the Edgware-road, a back entrance from Berkeley-mews in the rear, and also a residential flat on the ground floor facing Connaught-street. The caretaker's apartments are in the basement.

The premises are heated throughout on the "Panel" system, but fireplaces have been provided in all rooms, with gas and electric power laid on, so that the tenants have the alternatives of gas, coal, or electric fires. Hot and cold water are laid on to all bedrooms.

The general contractors were Messrs. Patman and Fotheringham, Ltd., and the following were sub-contractors:—Edward Wood and Co., Ltd., steelwork; H. W. Cullum and Co., Ltd., concrete floors; Patent Impervious Stone Co., Ltd.; artificial stone; Richard Crittall and Co., Ltd., heating and hot water; Marryat and Scott, Ltd., lifts; Walter Macfarlane and Co., iron stairs and railings; Henry Hope and Sons, Ltd., steel sashes; J. A. Lawford and Co., asphalt; Sir Duncan Watson and Co., electrical work; Tylors, Ltd., sanitary fittings; Martin Van Straaten and Co., wall tiling; Jos. F. Ebner and Hollis Bros. and Co., floor finishings.

The architects are Messrs. George Lansdown and Brown, FF.R.I.B.A.

London Aircraft Terminus Competition.

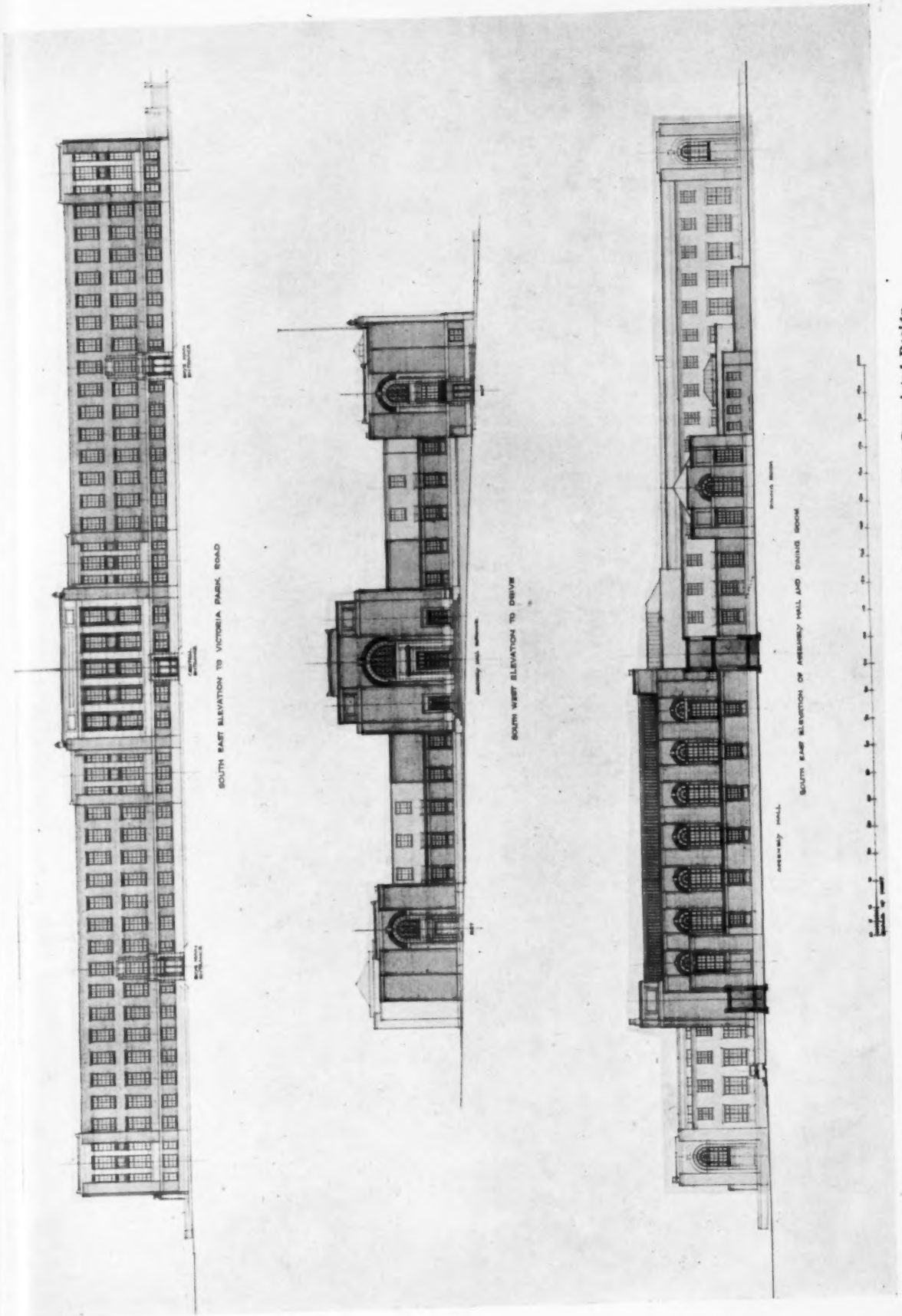
The two designs placed first in this competition were illustrated in our last issue. We give this week the second premiated design, by Mr. L. C. S. Farmer.

"A Large Public Garage."

This design has been prepared as an R.I.B.A. Final Examination Testimony of Study, and is by Mr. A. L. McMullen. The Board of Architectural Education wish it to be known that these drawings are published for the guidance of students, not as perfect solutions of the subjects, but to show the general standard of Testimonies of Study approved by the R.I.B.A.

A House at Gerrards Cross.

This house has been built on the Duke's Wood Estate. The external walls are 11 in. hollow, with keyed Fletton bricks on the outside, limewhited, with tarred plinth. The whole of the ground floor doors are of oak, with ledges and wrought-iron strap hinges; the fireplaces are of brick, and the wrought-iron dog-grate in the sitting-room was made by a Dorset blacksmith. The whole cost was under £1,000. Mr. S. Cameron Kirby, A.R.I.B.A., is the architect.


SOUTH EAST ELEVATION TO VICTORIA PARK ROAD
SOUTH WEST ELEVATION TO DRIVE
SOUTH EAST ELEVATION OF ASSEMBLY HALL AND DINING ROOM

Competition for Wyggeston Grammar School for Boys, Leicester: First Premiated Design.

MR. JAMES MILLER, A.R.S.A., F.R.I.B.A., Architect.

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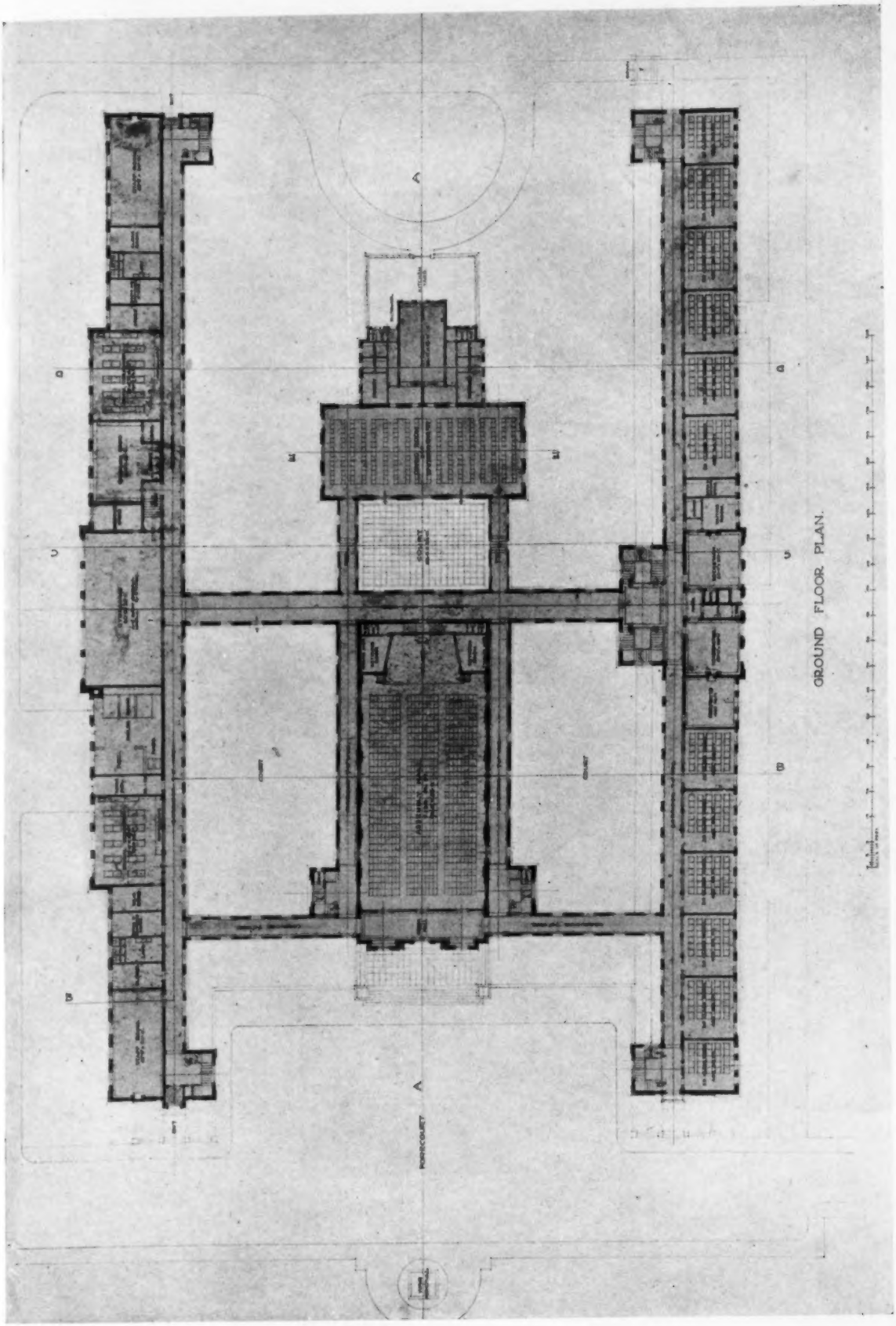

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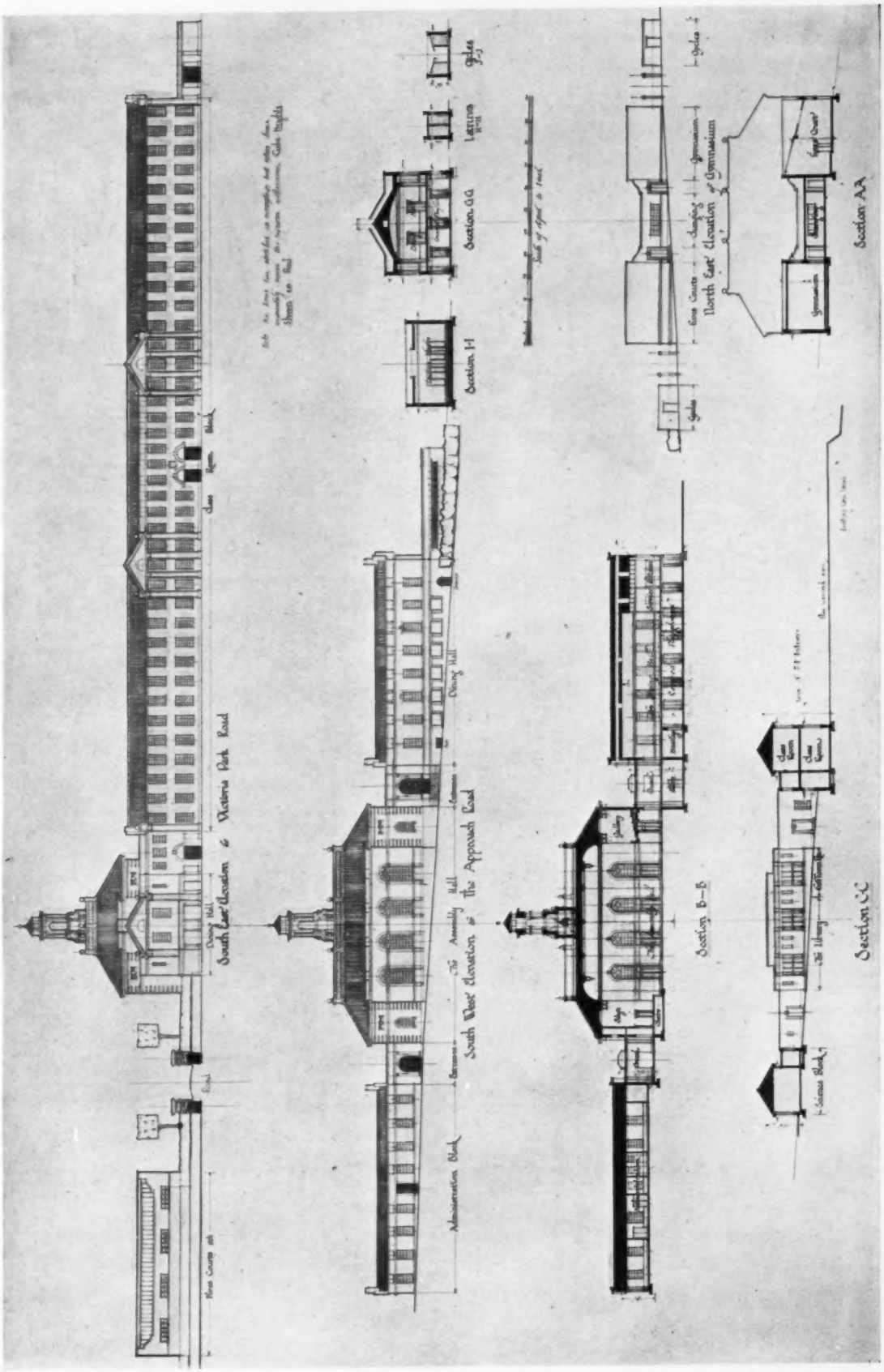

Competition for Wyggeston Grammar School for Boys, Leicester: Second Premiated Design.

By Messrs. A. Bailey and D. H. McMorran.

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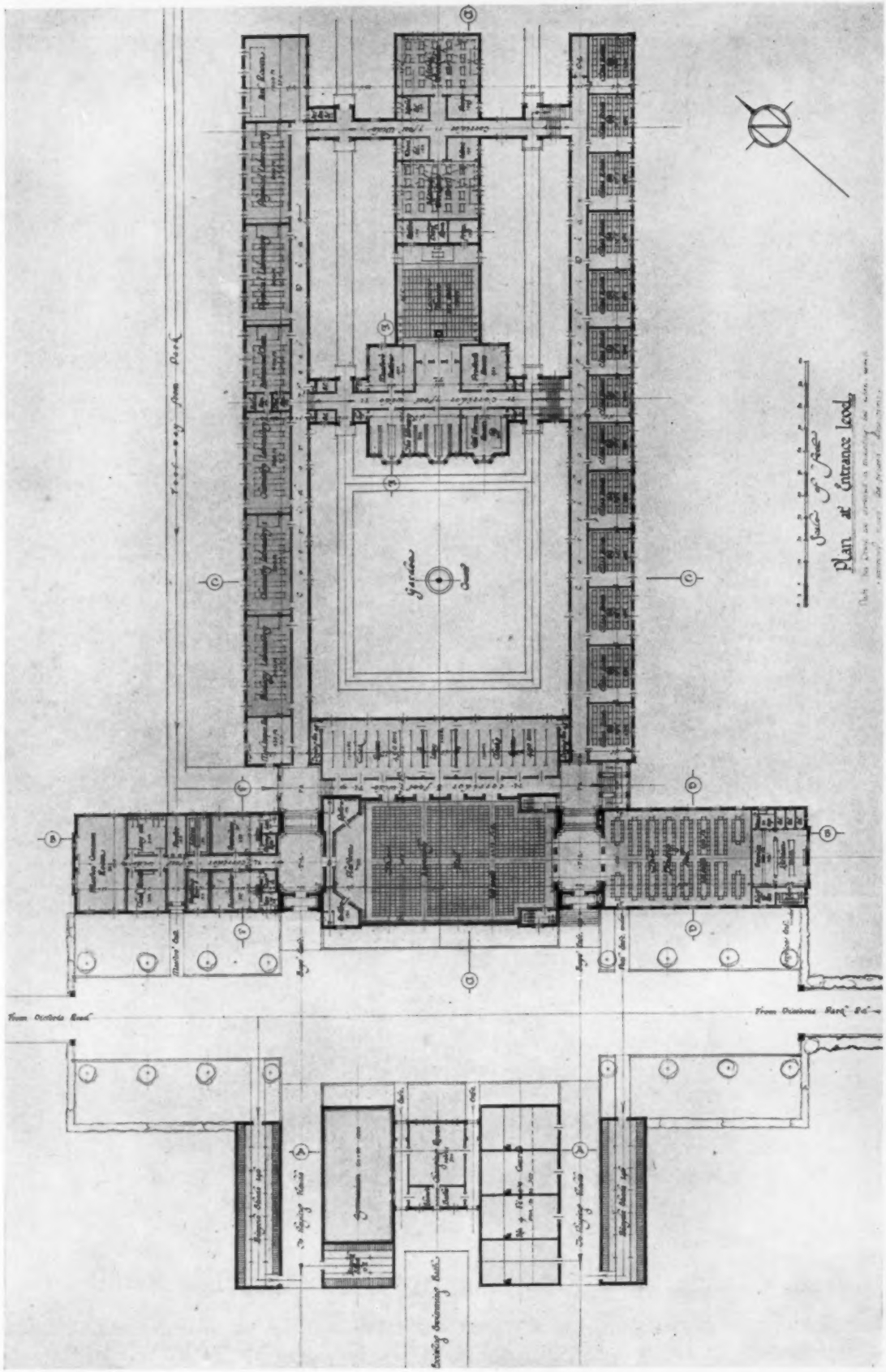

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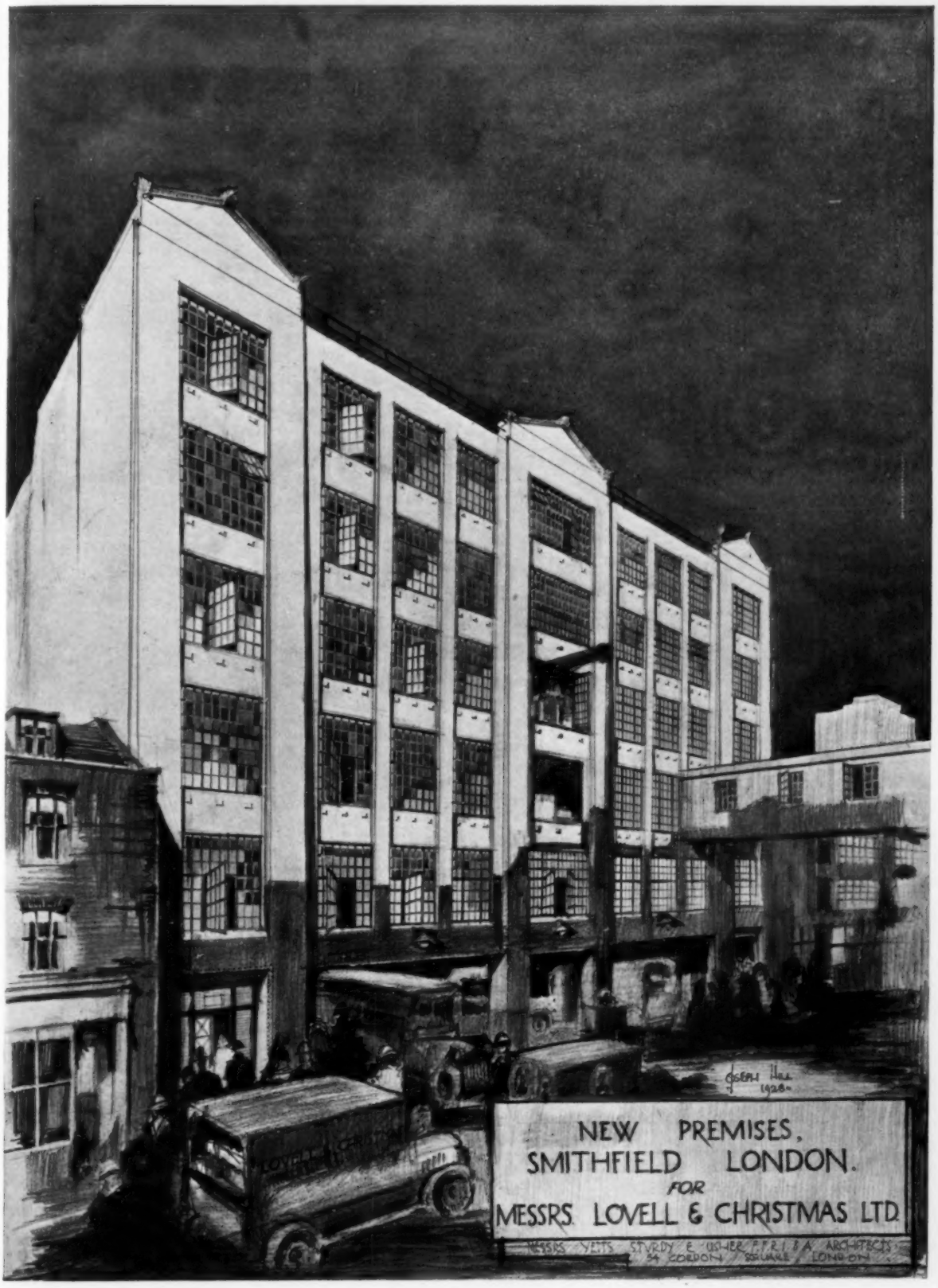

MESSRS. ARTHUR F. USHER and JOSEPH HILL, FF.R.I.B.A. (MESSRS. YETTS, STURDY & USHER, FF.R.I.B.A.), Architects.

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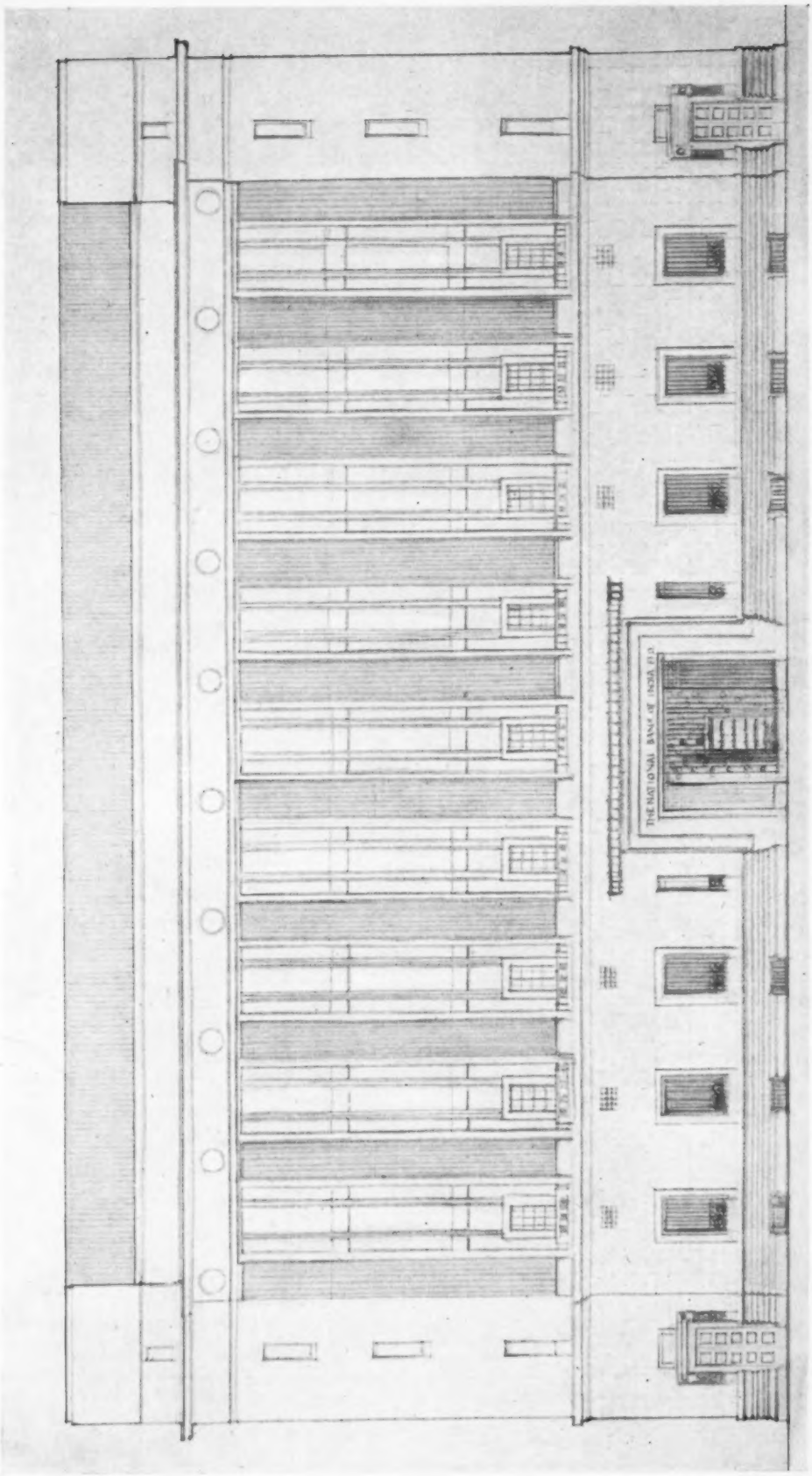

National Bank of India, Rangoon: Main Facade, facing Phayre Street.

Mr. T. O. Foster, F.R.I.B.A., Architect.

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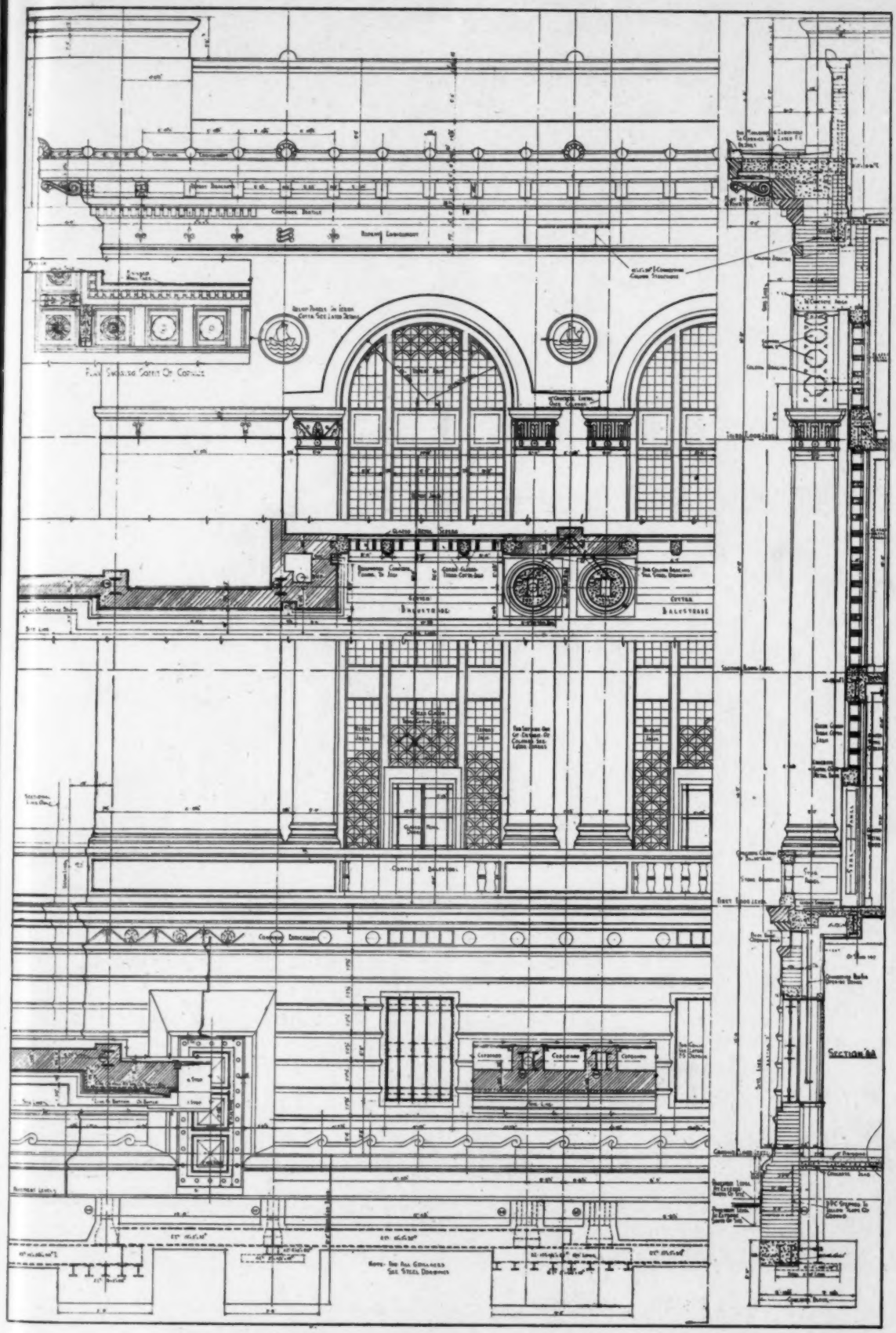
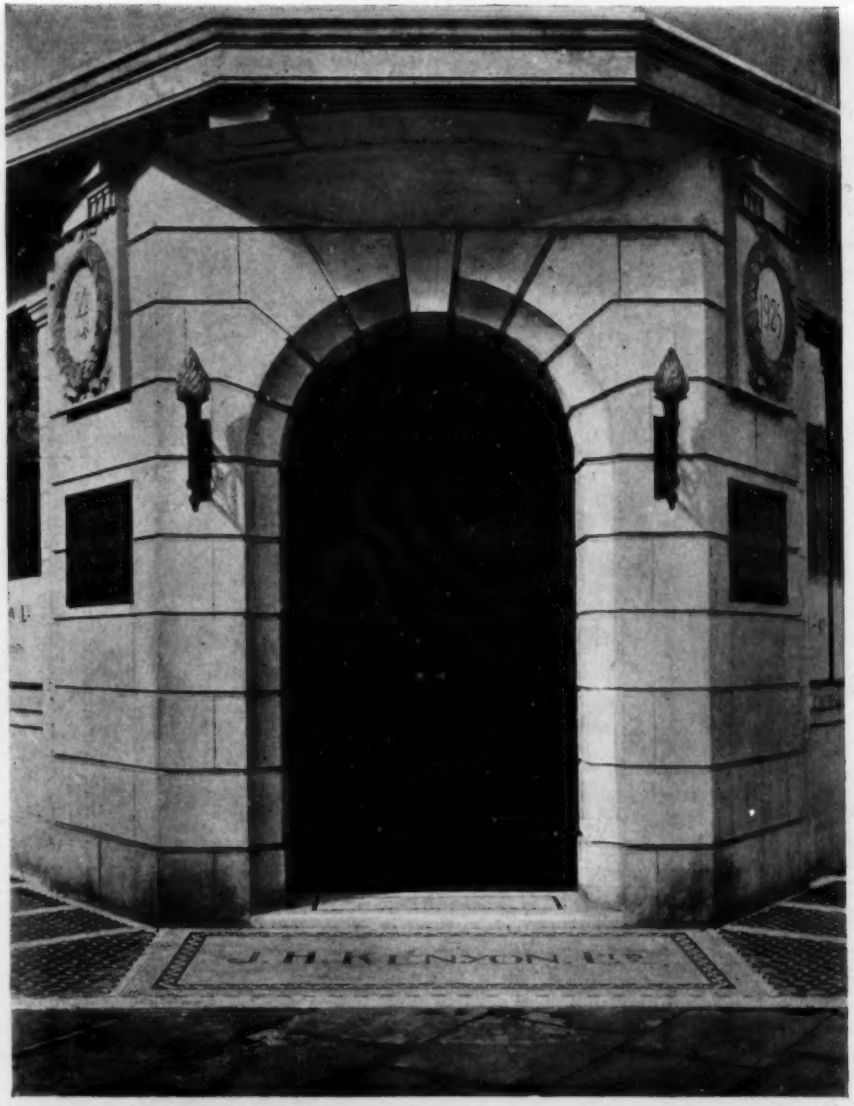


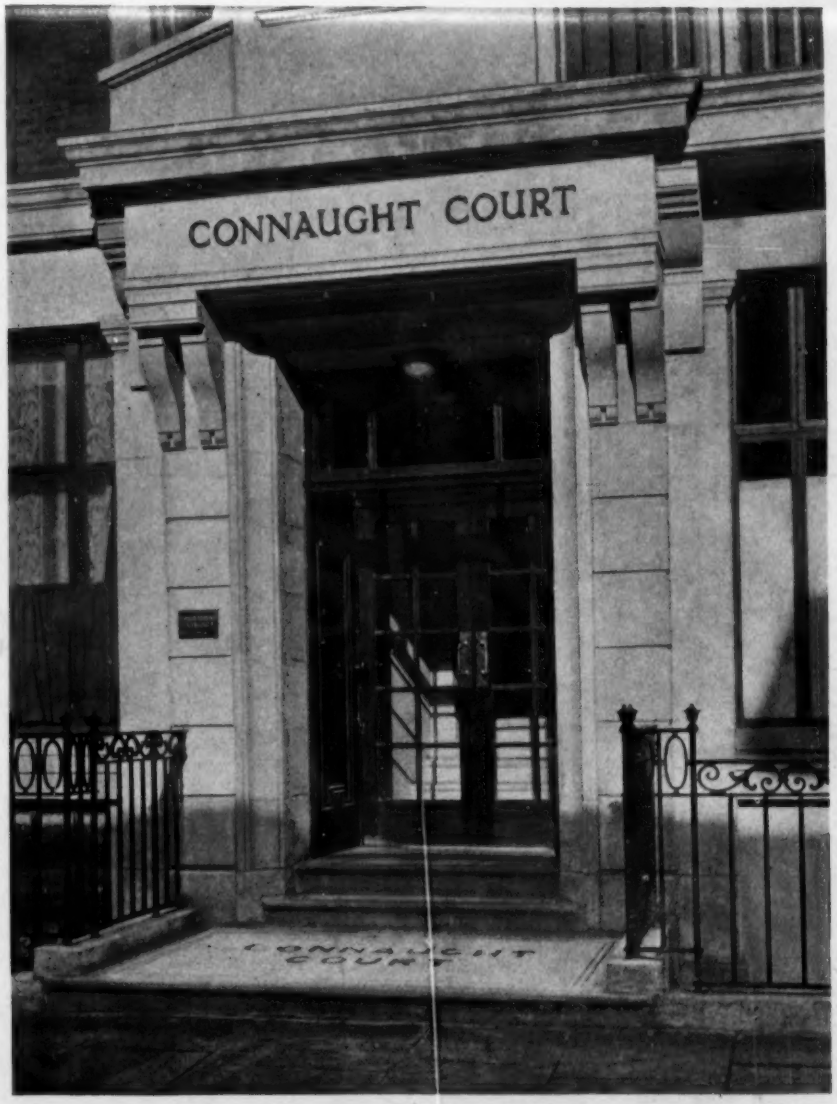
New Port Trust Offices, Rangoon: Detail of Phayre Street Facade.

MR. T. O. FOSTER, F.R.I.B.A., Architect.

"Connaught Court," Edgware Road, W.

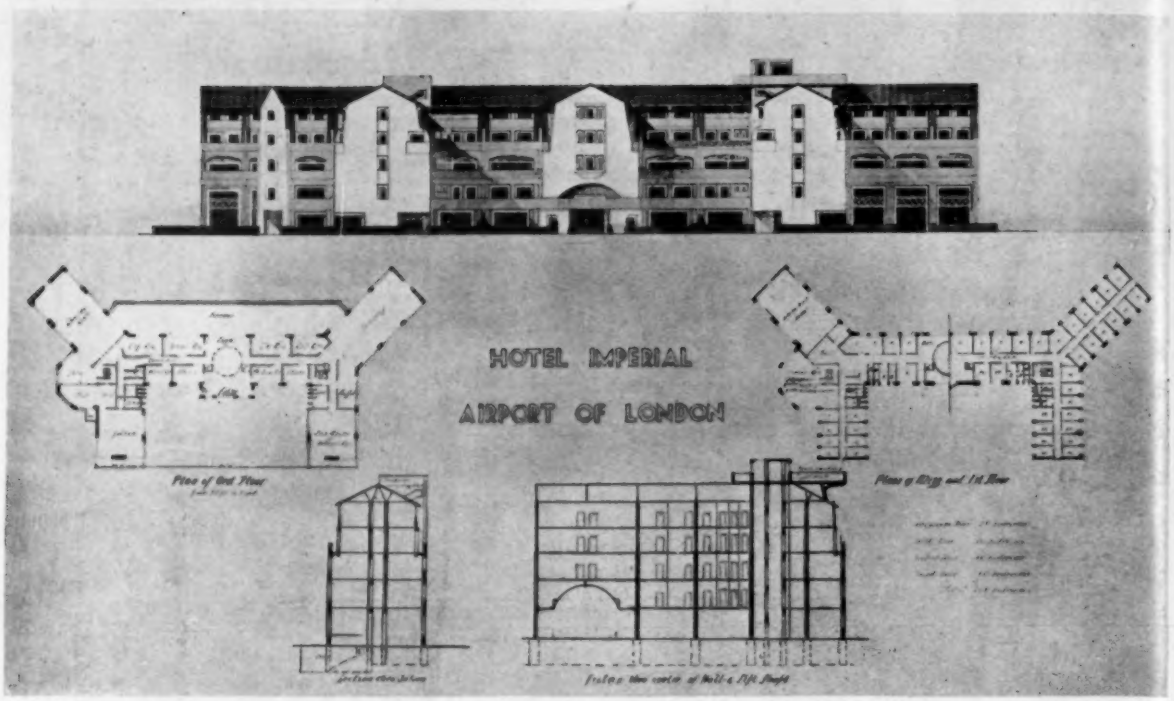
MESSRS. GEORGE LANSDOWN & BROWN, FF.R.I.B.A., Architects.

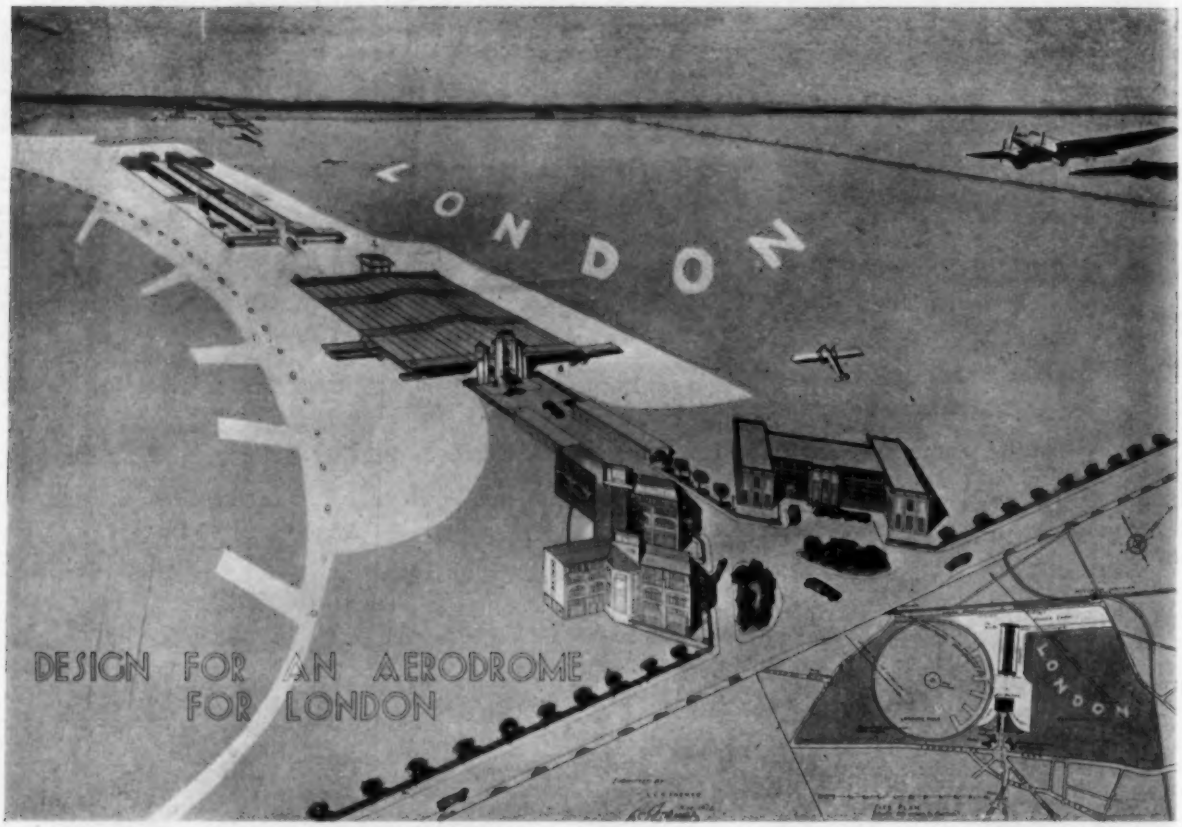




"Connaught Court," Edgware Road, W.: Details of Entrances.

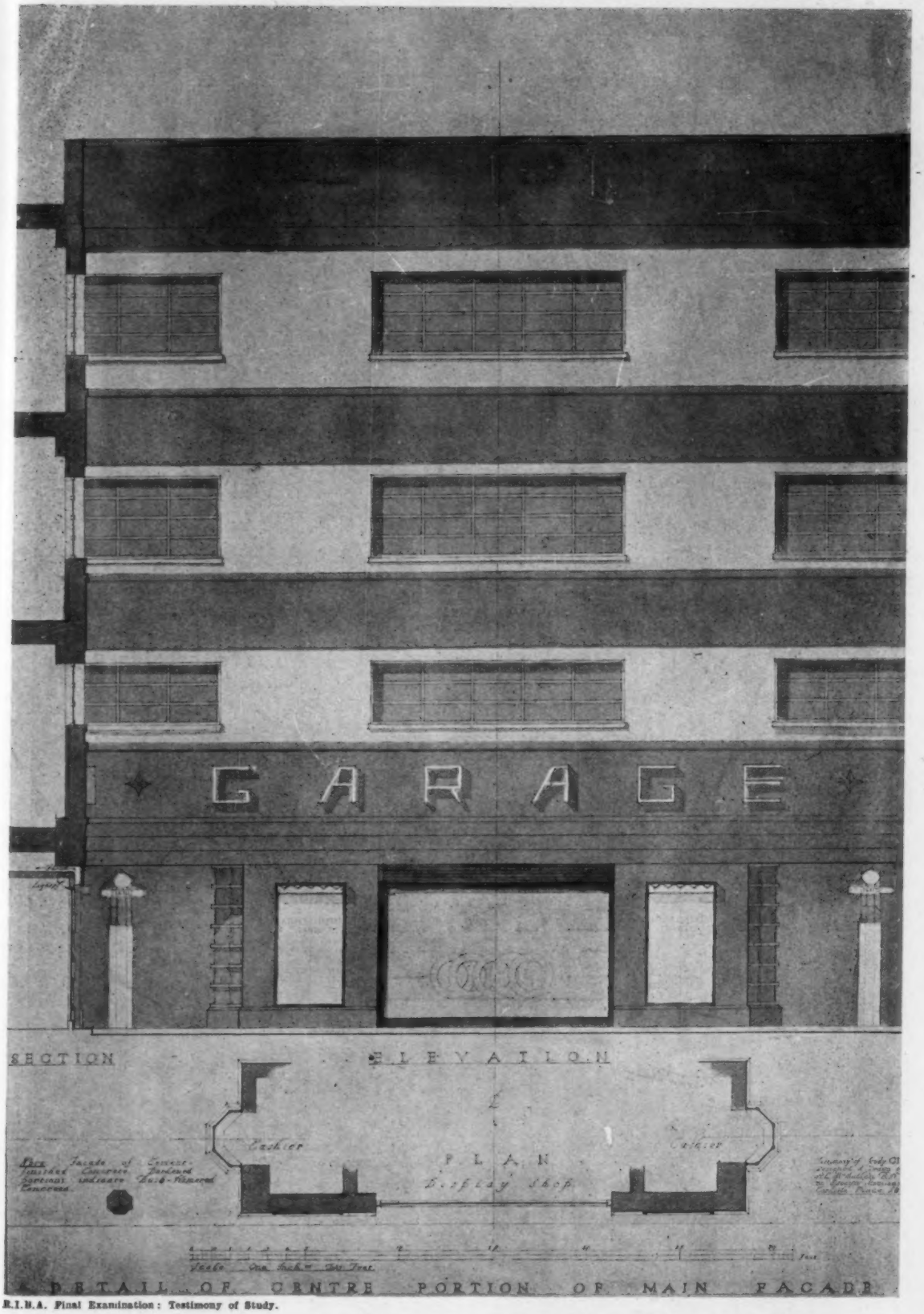
MESSRS. GEORGE LANSDOWN & BROWN, FF.R.I.B.A., Architects.





London Aircraft Terminus Competition: Second Premiated Design.

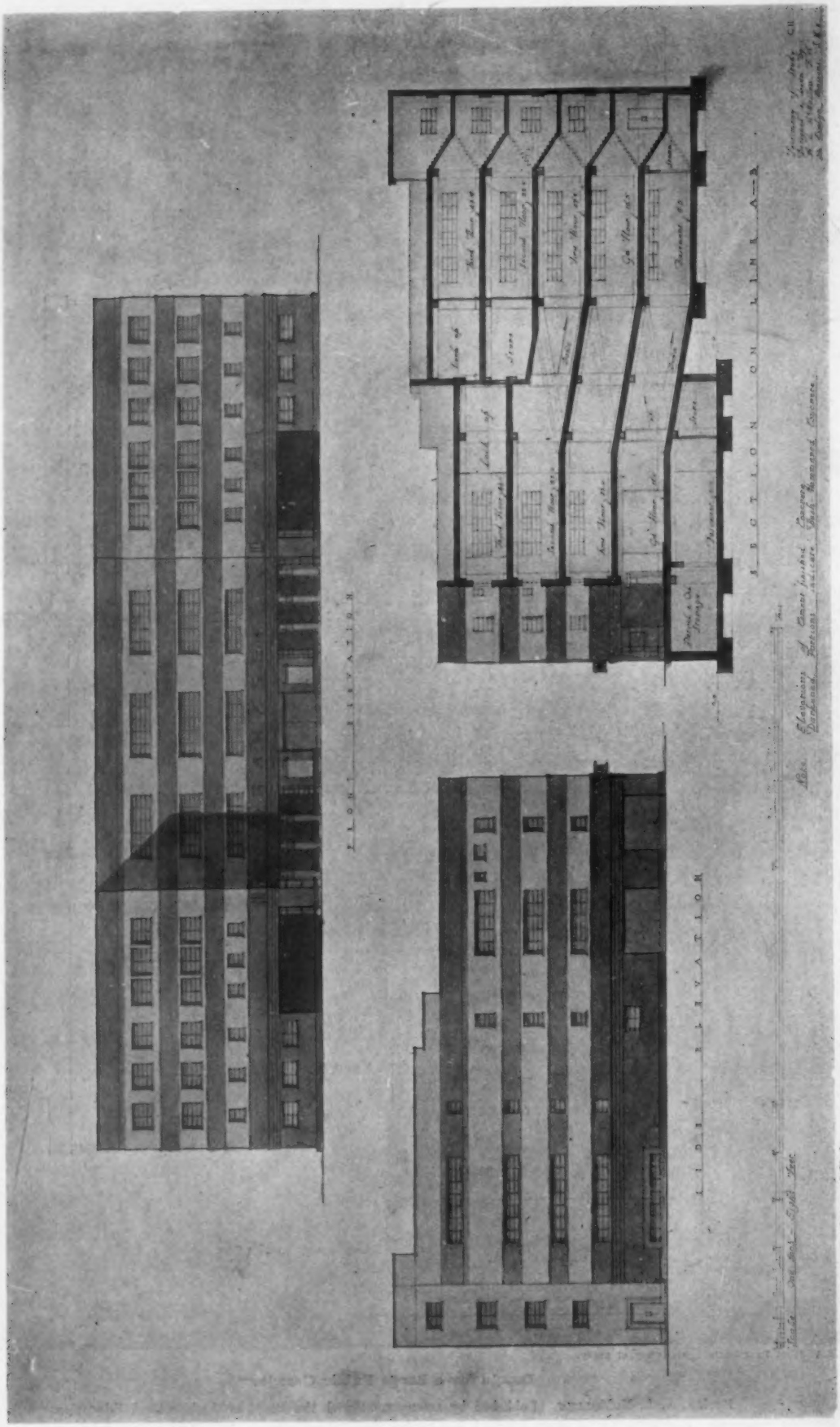
By MR. L. C. S. FARMER (Regent Street Polytechnic).



R.I.B.A. Final Examination: Testimony of Study.

Design for a Large Public Garage.

By MR. A. L. MCMULLEN. (Published by arrangement with the Board of Architectural Education)



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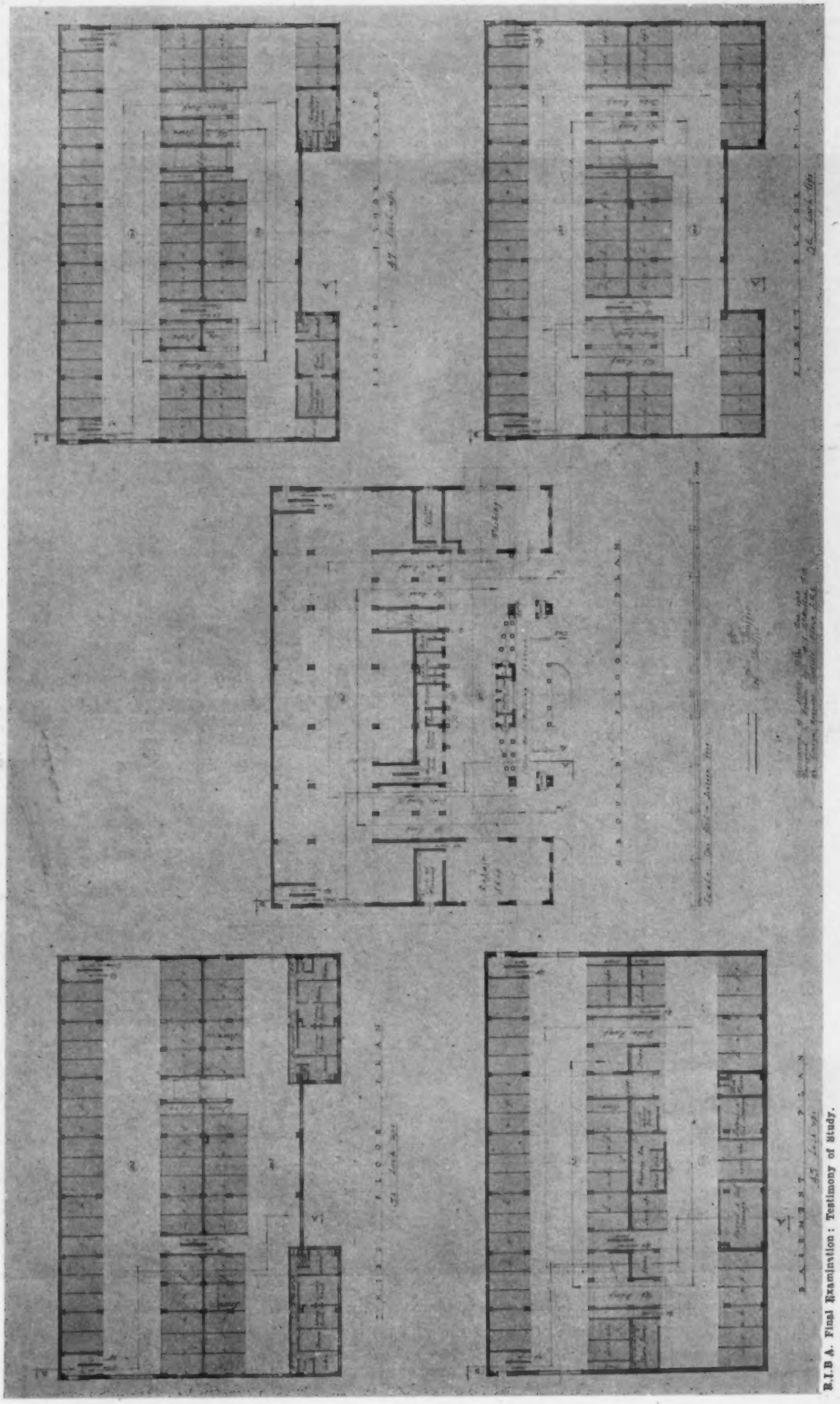

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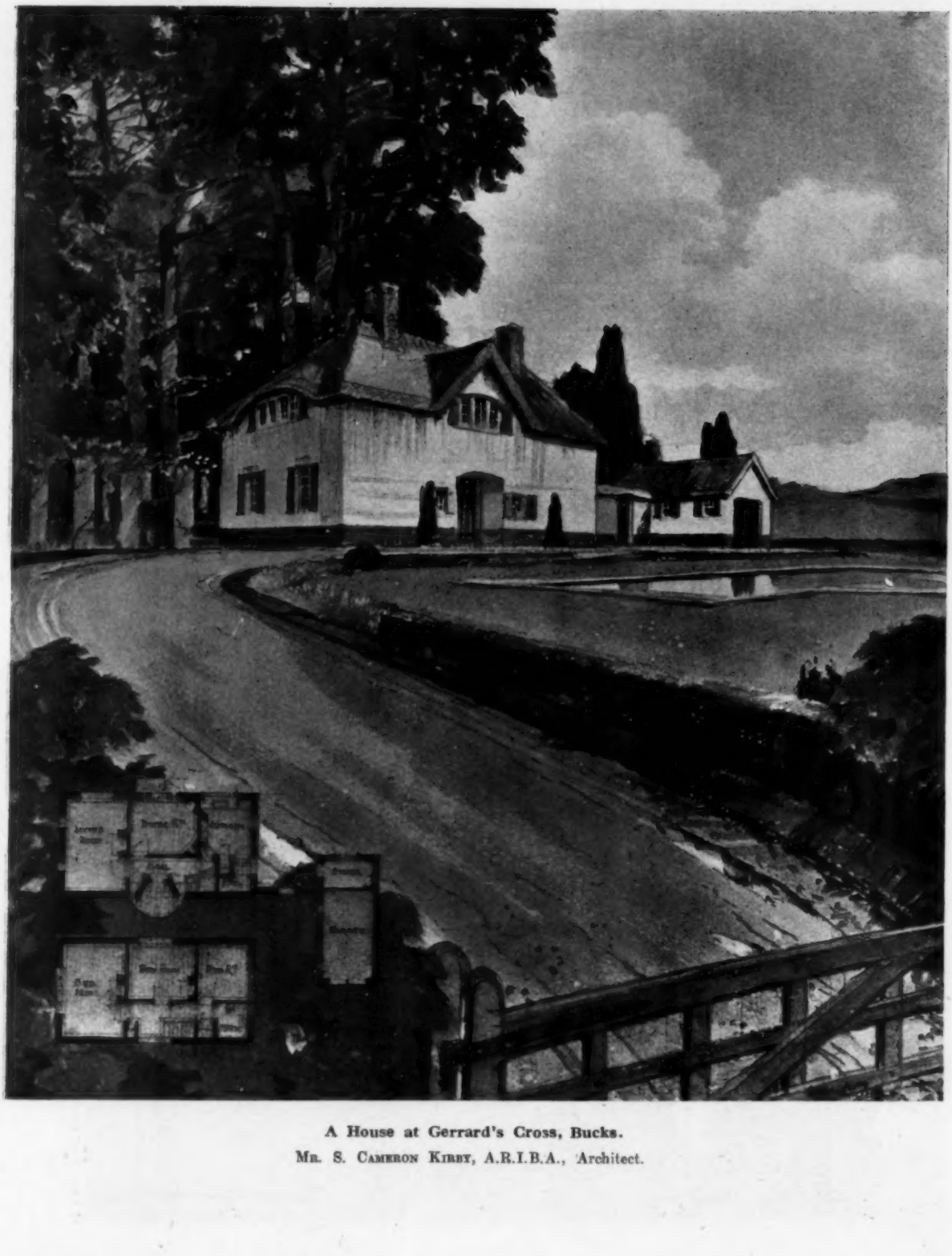


A House at Gerrard's Cross, Bucks.

MR. S. CAMERON KIRBY, A.R.I.B.A., Architect.

ARCHITECTURE AS ENGINEERING—II

By W. R. LETHABY.

DURING the Renaissance period the tradition slowly changed in regard to the status of building directors, but still what we now call civil engineering was within the architect's province, and the man called an engineer was an expert in war engines. Even so the great practical artists covered the whole field. Leonardo was employed in war work. Durer must also be mentioned as having had the exploring mind, interested alike in painting, geometry, and in structures. The architects Wren and Robert Hooke were of the same type in England. Wren had the inventor's brain. St. Paul's is essentially a structure, not an exercise in style, although as he said, he had to work in the "gust" of his age. His real mind often appears in his writings. Just as my last part on Structural Geometry had been printed I found in Wren's MS. notes on the Mausoleum these words: "I have been longer in this description because the Fabrick was in the age of Pythagoras and his School, when the World began to be fond of Geometry and Arithmetick."

I have seen a letter of Hooke's at the British Museum proposing experiments in gravitation. While I am putting these notes together Dr. Gunther, the Oxford authority on scientific instruments, writes in the *Times* that Hooke was "the real father of microscopy. Hooke was one of the most remarkable geniuses that the world of science has ever produced as well as one of the most neglected. I wonder how many people who use pocket-watches know that it is to him that good time keeping by balance wheel and escapement is principally due." And this was Robert Hooke, architect.

The isolation of the constructive engineer from the architect is a very modern phenomenon. What an engineer was to Shakespeare is shown by the passage in *Hamlet*: "For 'tis the sport to have the engineer hoist with his own petard." The definitions in Bailey's Dictionary, 1766, are these: "Engineer, Enginier—Person skilled in fortification, building, attacking, defending, castles, forts, etc., also in making fireworks. Fr." They had not then settled how to spell the word, and there was as yet no "engineering" much less Civil Engineering. Up to about a century ago "architecture" and engineering were interchangeable phases of constructive work.

George Dance, Junr., Surveyor to the Corporation, who built Newgate Prison, reported in 1814 with William Chapman and others on substituting four large arches for eight in old London Bridge. He proposed a plan for crossing the river by two parallel bridges, a very fine scheme.

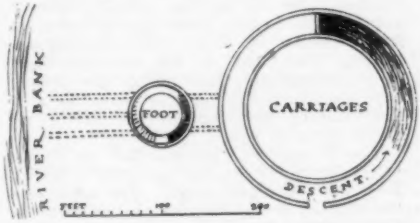
Ralph Dodd (1756?—1822), "a well-known engineer and architect," was the author of several works on engineering. He was interested in the schemes for rebuilding London Bridge," and was the projector of Vauxhall Bridge, the Thames Tunnel at Gravesend, and other schemes."

The constructors of the London bridges built early in the nineteenth century are spoken of either as engineers or architects.

"Vauxhall Bridge had, in consequence of disputes, four architects—Mr. Ralph Dodd, Sir Samuel Bentham, Mr. Rennie, and lastly Mr. James Walker who carried the design into effect. It consists of nine arches of cast iron of 78 ft. span; it was opened in July, 1816. The Strand or Waterloo Bridge was partly projected by Mr. George Dodd, but was wholly brought to perfection by Mr. Rennie; it has nine elliptical arches of 120 ft. span; it was opened June 18, 1817, the anniversary of the Battle of Waterloo, when it received its name. Southwark Bridge consists of three immense arches of cast iron, the centre being 240 ft. in span: the architect was the late Mr. Rennie, and the edifice was opened by lamplight March 24, 1819, as the clock of St. Paul's tolled midnight" (*Chronicles of London Bridge*, 1827). Soane was an architect who still retained the constructive type of mind.

Brunel, in the tunnels and viaducts of his railway work, displayed the sense for order and propriety that English engineers since his day seem to have lost. I have before me a little engraved plan of the Thames Tunnel showing 1,100 ft. completed March 3, 1840, and inscribed in MS. "To James Browell, Esq., Guy's Hospital, from the author, Mr. J. Brunel, May 19, 1840." The plan has the simplicity of a work by San Gallo or Christopher Wren (see below). It is utterly different in spirit from the wriggles and foulness which now pass as engineering. Some of the early suspension bridges were clear and direct solutions of problems which may interest a human creature. Of late years I can only think of one architectural or engineering work in England that has this large scientific sense, the Forth Bridge.

About the middle of the nineteenth century some wrong turning was taken which opened a widening abyss between architects and engineers at the same time as both became more professionalised. Up to this period it had been open to gifted men like George Stephenson or Joseph Paxton to make contributions to constructive art just as it had been possible for Wren and Inigo before them. I have no doubt that shutting out the amateur is a way of sterilisation, but this is another notion which may not be pursued. From that time architects were more attracted to stained glass, upholstery, and perspective "designs." The engineer became a cog in the machinery of steam



expansion, a willing agent of company exploitation for dividends.

During the rest of the nineteenth century engineers hired themselves out to provide any kind of silly ramshackle instruments in the scramble. "Hence such horrors as the bringing of railways into old cities (Oxford, for instance), Charing Cross and other bridges, and tawdry marine piers; all the lowest intellectual work of man, without civic dignity, recognition of land beauty, or a reverence for their own great art, the art of pure structure." (I am quoting from some notes of mine on "The Engineer's Art" in *Architecture*, July, 1925.)

"On the Continent, in France, Switzerland, and Germany, engineers have conserved a better tradition of their noble art, and one may see scores of works which may be looked at with high interest as embodiments of intelligence and force with a sense of public propriety. We need to recognise that every art must observe the amenities and courtesies of community life and we must call for higher types of service than our engineers are wont to give us. We must expect from them respect for their art as an essentially noble thing requiring every power they have to perfect into highest efficiency with fitting finish. Engineering in its proper nature is a noble structural art; perhaps in the present age the leading and most typical of our national arts." Here and there may still be seen a piece of engineering work that is intelligent and interesting. A brick railway viaduct near Surbiton always gives me pleasure, and an iron station shelter at Wimbledon is rational and tidy. I wonder who worked it out. The most real and vital building work done in the nineteenth century preserved in it some engineering element. We are mostly agreed about Waterloo Bridge. Some lighthouses and water-towers are towers indeed and do not affront the landscape. Compare the Albert Hall with the Albert Memorial; also the fine roof of St. Pancras Station with the "frontage" of the building.

Look back over modern architectural works according to the dissolving views of several enthusiasms: half-timber, cut-and-rubbed brick, and terra-cotta "movements," Gothic, Tudor, Byzantine, and Grand-manner "styles." Which of them has any worth or staying power? Perhaps the Roman Cathedral at Victoria is exceptional because it has a building and engineering element.

Again, I would speak of the betraying power of words. The whole "æsthetic" approach to constructive art has been most destructive of it in fact. This word which seems so fine and attractive is of very modern use. Carlyle is said to have first imported it from Germany. The word "styles" has been injurious beyond all computation in putting "look" and seeming in the place of being. We cannot now conceive of buildings not in "one of the styles," and directly some general idea like *perfect structure* is suggested our minds immediately search round with the inquiry: "What style would no style be?" Classification by styles is a way of explaining the past; it is a method of history. Nothing living is in a fixed style, life is a becoming. The styles are not ways of doing, they are ways of being dead. They are only museum labels.

If in the study of the history of old arts we had classed them as epochs instead of as "styles" we should hardly, I think, have had so many practitioners of the Classic epoch and the Gothic epoch, although, perhaps, we are even equal to that, too. Such names, however, would have been more absurd.

That mediæval building has been called the Gothic "style" is indeed a tragedy. It represented one moment in European history, a step in a great process—the Orientalising of Western art. Modern stuff called by the style name is not of its substance, and it would be good if instead of calling it GOTHICK we would call it GOTHIN.

The engineering element is necessary to keep the art of building sound, vital and adventurous. When it was separated from "architecture" that became an oppressive vehicle of mere ostentation. Some time in the future we shall have to put realities in the place of vain shows. These questions are much more serious than any opinions of taste; they are of deep national concern, and our seeming contentment with the sham styles frightens me. We need to concentrate on masterly structure without overlay or disguise. The type of architecture given us by a sort of clergy of "taste" must disappear. Apprentice architects must found themselves on mathematics and go through the shops and the works. Builders, architects, engineers must come closer together. A drawing nearer of architects and engineers could not be other than helpful to both. They should be educated together. Engineers might persuade architects to put away their playthings—orders, styles, "proportions," features, grandeurs, make-believings, and to build like men; while architects might suggest to engineers that there is something in the idea of loyalty to an art which carries farther than aims of exploitation for quickest profit. We all owe something to England.

Note.—Since this was written there has been some correspondence in the Press on engineers and architects. That these notes should deal with the same question is mere coincidence. Referring back to my little essay on geometry, I gather from a kind letter that it may be thought that the "geometry" I meant is a system of proportion by triangulation and the like. Not for a moment did I intend this—I meant direct mastery of forms, structures, balances and the like. Something like exploration of constructive possibilities, not cobwebs of absurd systems of "setting out" according to some superstition. Engineers at least have got rid of such myths.

EASEMENTS OF LIGHT—II

MODERN METHODS OF COMPUTING COMPENSATION.

By JOHN SWARBRICK, F.R.I.B.A.

Some Modern Photometric Instruments.

In order clearly to understand the procedure necessary, it would be advisable to consider first how the results might be ascertained with photometers in the case of existing buildings. Naturally, the effect of a building that does not exist, and which has either been demolished or is merely proposed, cannot be determined by photometric readings, without the use of models. Amongst the best-known photometers used

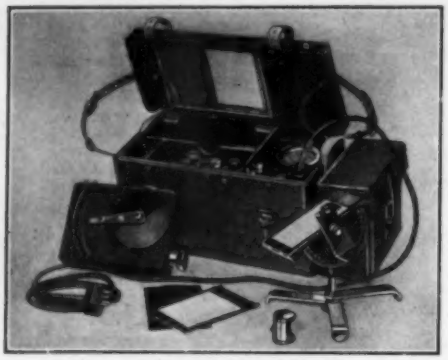


FIG. 15.—THE HOLOPHANE "LUMETER." COMPLETE EQUIPMENT.

for such purposes are probably the Holophane "Lumeter," the "Foot-Candle Meter" of the British Thomson-Houston Company, the "Luxometer" made by Messrs. Everett Edgecombe, and the Benjamin "Lightmeter." Those who are specially interested in photometry should consult "Principles of Lighting and Photometry" (Messrs. Methuen and Co., Ltd.), by Dr. J. W. T. Walsh, M.A., D.Sc., F.Inst.P., A.M.I.E.E., and "Illumination: Its Distribution and Measurement" (Messrs. Macmillan and Co.), by Mr. Alexander P. Trotter, late Electrical Adviser to the Board of Trade, Past President of the Illuminating Engineering Society. In the latter work, particulars will be found regarding all the recognised photometric apparatus then in use in this country, and other matters of special interest to physicists and others.

Probably few photometers are now so generally used for measurements of daylight as the Holophane "Lumeter." It is a portable instrument, which is illustrated in Fig. 15, and, as will be seen, it can be stored compactly in a small leather case. The small instrument lying on the left of the leather case is the "Lumeter" proper; beside it is the standard matt white glass test surface, on which the readings are usually taken. The test surface is protected in a light metal case which can, if desired, be fixed in the Test Surface Holder, illustrated in Fig. 16. Within the leather carrying case is a non-spillable accumulator, with a voltmeter and variable resistance, to enable the lamp in the instrument to be run at exactly the voltage for which the instrument is calibrated. The voltage is indicated by an arrow marked on the voltmeter scale. The entire equipment occupies about as much space as an ordinary half-plate camera, and it can be carried about quite easily. The "Lumeter" itself is of a light metal alloy, covered with vulcanite, and is quite light to handle. The internal mechanism is illustrated in Fig. 17. It will be observed that the underlying principle of the action of the "Lumeter" is that the observer is able to compare the brightness of a matt white test surface, placed in any position and seen through the eye-piece, with that of a photometric screen inside the instrument (illuminated by a standard lamp, also contained in the latter), which appears to surround the image of the distant surface. When using the instrument the distance from the test surface to the "Lumeter" does not affect the accuracy or indication of it. The chamber containing the comparison lamp B is cylindrical. G is a rectangular aperture covered by a diffusing screen illuminated uniformly by the lamp inside. This in turn acts as a source of light and illuminates the photometric screen C. The lid A, with pointer H attached, forms the top of a cylinder in which is cut an aperture of special shape. The cylinder fits concentrically round the lamp chamber and rotates as the pointer H moves over the scale K.

The standard Range B "Lumeter" is now arranged to permit of direct scale readings from 0 to 20 foot-candles, and by the introduction of neutral filters illumination readings up to 2,000 foot-candles can be obtained, while for daylight measurements extra filters can be supplied to enable measurements up to 20,000 foot-candles or more to be read. With the aperture fully opened, the pointer rests at the end of the scale and reads 20 foot-candles. But as the pointer is moved from the position, the outer cylinder rotates, and the exposed portion of the diffusing screen is uniformly reduced to one-half of the original area, when the pointer is one-third the way along the scale. The reading at this point is, therefore, 10 foot-candles. By moving the pointer forward another third, this area is further uniformly reduced by 50 per cent., making the reading then half of the previous one, or 5 foot-candles. By moving the pointer over the remainder of the scale the area and reading are together uniformly reduced down to zero.

The "Lumeter" is connected up to the voltmeter panel by the quadruple flexible leads and four pin plugs. The knob controlling the rheostat under the voltmeter is then turned until the voltmeter needle comes on to the arrow marked on the scale. The standard lamp is then operating at the correct voltage for which the instrument was calibrated. The voltmeter should be watched at intervals throughout the test and the resistance cut out gradually as necessary to correct for slight reductions in voltage of the battery as the latter is discharged.

To measure the illumination in foot-candles the standard test surface should be placed in a position where the illumination is to be tested. The observer then holds the instrument to his eye and looks through the eye-piece E at the test surface. He then sees the surface to be tested through the central aperture D in the internal photometric surface C. The pointer H is then adjusted until there is an equality

FIG. 16.—THE HOLOPHANE TEST SURFACE HOLDER.

of brightness between the two screens, when the intensity of the illumination is indicated by the pointer on the scale K. To accommodate readings above and below the direct scale, there are also (at M) two neutral filters, with absorptions of 90 per cent. and 99 per cent. respectively. With both knobs N pushed in, the 10 per cent. filter only is in the path of the light from the test surface, and the instrument indicates in accordance with the engraved scale. By pulling out the knob marked "÷ 10," this 10 per cent. filter is removed and the direct scale is then divided by 10, making the full scale reading 2 foot-candles. By pulling out both knobs N, the engraved scale is multiplied by 10, or, by pulling out the knob marked "× 100" only, the instrument indicates up to 2,000 foot-candles.

Observers find a difficulty in making daylight measurements owing to the difference in colour between natural daylight and the light from the electric lamp inside the instrument. To obviate this difficulty a special yellow correcting screen is utilised which can be inserted in the path of the light entering the instrument, making it a complete colour match with the light of the electric lamp. Since absolute values of daylight illumination have very little value, the actual total absorption of this screen need not be allowed for. The screen is kept in position both when taking the internal measurements and also whilst making the external comparisons. Ob-

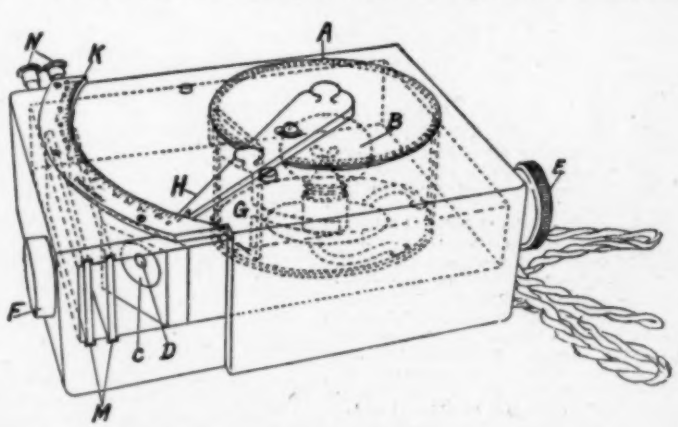


FIG. 17.—INTERNAL MECHANISM OF THE HOLOPHANE "LUMETER."

viously the all-important ratio between these two will not be affected by this factor, which will cancel out in the subsequent calculations.

The angle of incidence of the light to the normal to the test surface should never exceed 70 degrees. In cases where the angle of incidence is greater than this, "normal" readings should be taken, and the horizontal illumination, if essential, calculated from these by multiplying by the

FIG. 18.—THE HOLOPHANE ZENITH ATTACHMENT.

cosine of the angle of inclination of the test surface in each case. To facilitate this, the Holophane Test Surface Holder (Fig. 16) has been designed. This indicates at a glance both the angle of incidence of the light and the angle of inclination of the test surface.

As shown, the rotating arm, carrying a lens at one end and a screen with cross lines at the other, is set so that the pointer attached to it is over the 0 degree division on the angular scale. The whole apparatus is then swivelled until the image of the light source formed by the lens falls on the cross lines. When this occurs, the test surface is truly "normal" to the incident light, and the angle of inclination of the test surface from the horizontal is automatically indicated by the other pointer hanging behind the same scale. Since the holder is provided with spirit levels, the test surface can be set for horizontal illumination tests. When this is done, the "optical pointer" can be turned independently, until the image again falls on the cross lines. The position of this pointer then indicates the

FIG. 19.—INSTRUMENT NOW USED AT THE NATIONAL PHYSICAL LABORATORY FOR ASCERTAINING AVERAGE SKY BRIGHTNESS AT ONE READING.

angle of incidence of the light to the normal to the test surface.

By means of the Holophane "Zenith" Attachment (Fig. 18), the exterior test surface is enclosed in a small camera-like box and attached to the "Lumeter." By an arrangement of "stops," the light from a small and defined area of sky is allowed to illuminate the card. All that is necessary in use is to fit the attachment to the end aperture of the "Lumeter" and take a reading out of doors, where the instrument has a clear view of the sky, with a stop of suitable aperture to bring the reading to a convenient part of the scale

Amongst the latest additions to the appliances now used at the National Physical Laboratory at Teddington for the measurement of artificial light are the two Integrating Spheres. The larger sphere is fully described in Technical Paper No. 5: "The Measurement of Mean Spherical Candle-Power." The same principle may be observed in an exceedingly useful instrument, illustrated in Fig. 19, which has just been introduced for the purpose of ascertaining average sky brightness at one reading. This instrument contains an internally whitened sphere, 4 in. in diameter, with a circular opening at the top, 1½ in. diameter. When the apparatus is in use, the sphere is carefully adjusted so that the edge of the aperture lies exactly in the horizontal plane. The luminous flux entering the aperture is proportional to the horizontal illumination due to the sky alone. The flux is measured by means of a portable photometer of the Macbeth pattern sighted through a small hole in the sphere on to a portion of the inside wall opposite. The arrangement of the sphere and photometer is shown in the illustration It will be noticed that the observer's head can be kept below the level of the aperture in the sphere and so would not obstruct the light. It will be seen from Appendix B, "The Theory of the Integrating Sphere," on page 37 of Technical Paper No. 5, that the brightness of the internal surface is less than that of a matt card of the same reflection factor, ρ, placed over the aperture. In fact, the ratio of the two is approximately equal to

$$\frac{\text{area of sphere aperture}}{\text{area of sphere surface}} \times \frac{\rho}{1-\rho}$$

It is easy to determine this factor experimentally, and for the sphere illustrated it was found to have the value of 0.33. Consequently, the photometer readings had to be multiplied by 3 in order to obtain the true values of horizontal illumination.

WEST YORKSHIRE SOCIETY OF ARCHITECTS' ANNUAL DINNER

THE dinner of this Society was held on Thursday, January 24, at the Great Northern Hotel, Leeds, the President, Mr. G. H. Foggitt, A.R.I.B.A., in the chair. Among those present were: Mr. Walter Tapper, A.R.A., P.R.I.B.A., Sir Robert Lorimer (President of the Royal Incorporation of Architects in Scotland), the Bishop of Knaresborough (the Right Rev. Lucius F. M. B. Smith), the Lord Mayor of Leeds (Alderman D. B. Foster), Mr. F. L. Charlton (V.-P., West Yorkshire Society of Architects), Mr. H. V. Lanchester (V.-P., R.I.B.A.), Mr. Sydney D. Kitson (hon. sec., R.I.B.A.), Mr. Stuart Syme (President, York and East Yorkshire Architectural Society), Mr. C. M. E. Hadfield (President, Sheffield Society of Architects), Professor W. T. David (President, Institute of Civil Engineers, Yorkshire Branch), Mr. Eric Morley (P.-P., West Yorkshire Society of Architects), County Alderman G. B. Lomas-Walker (President, Leeds Law Society), Mr. Norman Culley, and Mr. S. Flockton (President, Leeds Master Builders' Federation).

Professor A. Hamilton Thompson, proposing the toast of "The Royal Institute," congratulated the West Yorkshire Society on having a membership of over 300.

Mr. Walter Tapper, in reply, said the education of the architect was necessary, but the education of the layman was almost more so. As spokesmen of the art of architecture in that district his hearers had to impress upon laymen the vital importance of architecture as a real aid to civilisation. In his opinion architecture was really an asset to sound commerce. It had been realised more readily in the last few years, but it still required emphasising a little. Walking for five minutes through the streets of London, Manchester, Birmingham, Sheffield, Leeds, or any other city, few men with eyes to see could help believing that we had fallen far below even the most moderate ideal in our street architecture, and to go through the outer districts of those cities was, with very few bright exceptions, a really bitter experience. In many cases it was not because there had been little money, but because there had been too much. What was chiefly wanted to-day, he thought, was the unhampered skill of a true architect, helped by the public spirit and inspiration of the public at large. It was often said in industrial cities that there was no time or room for beauty, so occupied were those in them in making money; but that was a profound fallacy. Athens, when at its zenith in architecture, painting, and sculpture, was one of the greatest commercial and wealthiest cities in Greece. In certain modern cities, New York, Chicago, Stockholm, and many others, great architectural works were to be seen, and even in industrial cities, now and again, rose a great building, not at the desire of the community at large, but despite their wanting it. There would never be beauty universally until the man in the street took an interest in his city.

Mr. Norman Culley proposed "The City of Leeds," and

The Lord Mayor of Leeds (Ald. D. B. Foster), in reply, said Leeds was a conglomeration of streets and houses built round factories. Some of the slums were wonderfully persistent, and what to do with them he did not quite know; but they must be moved before there could be beauty in the city.

Mr. Sydney D. Kitson proposed the toast of "The Allied Societies," and

Sir Robert Lorimer, in reply, said the design of bridges at the present time was most important. The reinforced concrete bridge was a thing that had come to stay, but he did not think they had got very far yet with the design. He could not see why some colouring matter should not be added to the cement to make the colour of the bridge more in harmony with the countryside in which it was placed.

The President (Mr. G. H. Foggitt), who replied to the toast, "The West Yorkshire Society of Architects," proposed by County Alderman G. B. Lomas-Walker, said that if by the magician's wand the slums in cities could be transformed into large blocks three or four stories high, constructed in a dignified, impressive, and economic way, a great deal would have been done towards making cities what all desired.

Mr. Eric Morley submitted "Our Guests," to which the Bishop of Knaresborough and Professor David responded.

The Thornycroft Statue, Kew Gardens.

The statue by Sir Hamo Thornycroft, R.A., which the Royal Academy recently presented to Kew Gardens, has been placed at the end of the Broad-walk, near Kew Palace. A pedestal has been made for it after a design by Sir Edwin Lutyens, R.A., and Mr. A. Drury, R.A. The work bears the title, "A Sower."

CHINESE ARCHITECTURE

A LECTURE on this subject, accompanied by lantern slides, was given by Mr. Percival Yetts at the Bedford College for Women, Regent's Park, London, on January 24, Sir Rennell Rodd, G.C.B., G.C.M.G., G.C.V.O., M.P., being in the chair.

The lecturer said that the Chinese were proverbially conservative, and probably their architecture had changed less than any other of their institutions. Few of the buildings which he would show them were more than six centuries old, and most of them dated no further back than a hundred years or so. Yet because of the Chinese habit of adherence to the standards of antiquity, those buildings photographed 20 years ago probably differed little from those which stood on much the same sites some 2,000 years before. Old buildings were rare in China—much rarer than they were in England, a fact which might seem strange in relation to a civilisation which had flourished continuously for three millennia and more. The explanation was that Chinese architects had followed the practice of depending on wood for structural integrity, as we at the present day did on frame buildings in iron or steel. We might conclude that Chinese architecture was limited to three types. The first and simplest was composed of a framework of two upright pillars, a ridge-pole, and supports for the thatched roof, which might in many instances have reached almost to the ground. The door was on one or other side of the pillars which supported the roof at its south end. The second type was a shorter slope of roof and a hipped gable at each end. Probably the primitive position of the door in the southern wall often prevailed, but sometimes the door was placed at the side. The third type was a round structure, used as a temporary abode when the farmers during the warmer months were working in the fields at a distance from their homes. On these three primitive types Chinese architecture was based. Even the most ambitious efforts of Chinese builders conformed to one or other of those types, and any elaboration was confined to decorative embellishment of the roofs, wooden framework, and walls. In ancient times the Chinese frequently fought with their neighbours as well as amongst themselves, and, therefore, every town was walled, and the practice had continued to recent years.

An ancient ballad described the building of a settlement over 3,000 years ago by the grandfather of the Chou dynasty. It contained this account of the earthen ramparts and walls of buildings:—

"They bound the frame-boards tight, so that
the walls should rise regularly.
Up rose the ancestral temple in its solemn
grandeur.
Crowds brought the earth in baskets:
They threw it with shouts into the frames;
They beat it with responsive blows;
They smoothed the walls, and they sounded
strong,
Five thousand cubits of them arose together.
So that the roll of the big drum was not
heard above the noise of the building."

The main gate of Peking certainly exceeded in grandeur the main gate of Nanking, though the vast wall which surrounded the present capital had a circuit longer by a mile or so than that of Peking. The Nanking wall ran for more than 24 miles, and in height it varied from 30 to 65 ft. The stupendous barrier which survived to-day, and extended from the sea on the east to a point 1,145 miles distant on the west, was conceived by the First Ch'in Emperor. He it was who abolished the feudal system when he established himself on the throne in 221 B.C. To protect the entire northern frontier of this newly formed realm against the traditional foes of China, this wall was built. Though 1,145 miles was the distance covered by the wall, stretching from the Yellow Sea to the border of Tibet, its actual length was much greater. It twisted and turned and often doubled back, as it followed the crest of the hills, and it had arms and loops, rendered necessary for strategic reasons. Thus the actual length of the wall could not be less than 2,500 miles. Though certain pre-existing walls were embodied in the new structure, they formed but a fraction of the whole. Thirty per cent. of the manhood of China were forced to take part in its building, and another thirty per cent. of the population were involved in various other ways. Probably no less than a million different labourers shared in the task. They were driven with relentless severity, and the corpses of those who died at the work were thrown into the embankment. So many were thus buried that the Wall might be regarded as the longest cemetery in the world. The age of the brickwork was open to question, but probably most of it was no older than the 14th or 15th century, and the main part of the original wall was of unfaced earth. Pounded earth, probably mixed with straw, was the material which provided the walls of most ancient Chinese buildings. The extreme simplicity of this mode of structure called for ornament in the dwellings of the great and rich. From literary sources we knew that the walls were painted.

According to written accounts, some of the palaces must have reached stupendous dimensions, even allowing for exaggeration. The First Ch'in Emperor in the 3rd century B.C. was said to have built 800 palaces throughout the empire. Whenever he conquered a principality, he erected in his capital a replica of the palace destroyed and adorned it with captured treasures. They numbered 145 in his capital, and each was kept fully staffed and provisioned, in readiness for the Emperor, should the whim take him to occupy it. Many miles of corridors hung with silken fabrics connected the various palaces. A huge audience hall, famed in history under the name of O-p'ang Kung, measured 500 yards from east to west, and 100 yards in width.

Ornamental tiles were one of the means by which Chinese architects enlivened the somewhat dull uniformity and simplicity of their architectural types. Probably tiles began to be used about the middle of the first millennium B.C., and from earliest times bore decorative designs or euphemistic mottoes. So far as we knew, at first the ornament was confined to the discs or half-discs which edged the eaves. During the last 1,000 years the Chinese appeared to have given freer play to their fancy in the matter of tiles. They had used modelled figures of all sorts of fabulous animals and legendary personages, and glazed them with colours which often conveyed a special significance.

A rare type, exceptional to the general wooden framework buildings, were the "beamless buildings," "wu liang tien," as they were called, which depended upon the arch for their stability. The Chinese had a habit of adhering to a symmetrical arrangement in planning their buildings, or rather groups of buildings. All but the poorest dwellings were composed of units grouped round courtyards and connected by covered passages. Most of those units being one-storied, the area covered by the home of a large family was considerable.

Describing the "Altar to Heaven," built of white marble and surrounded by an immense park in the southern part of Peking, the lecturer said the platform was laid in nine concentric circles, and the whole structure was arranged in multiples of the number of nine. Upon this platform, at the annual sacrifice, the emperor prostrated himself alone in worship to Shang Ti, the supreme deity. To the north was a second three-tiered marble altar, called the "Altar of Prayer for Grain" (Ch'i ku T'an). Upon it stood an imposing triple-roofed hall, which was an elaboration of the third primitive type. Its tiles glazed a purple blue, contrasted with the glistening marble and the dark red of the woodwork.

Of all the religions of China, Buddhism had most influenced architecture. The most signal type of building associated with Buddhism was the pagoda. Probably its origin was partly Chinese, but there could be no doubt that the pyramidal, many-storied monastery also had a share in its evolution. Next to the pagoda, the memorial arch, or p'ai-lou, was the type of structure which impressed the foreigner most strikingly. In its simplest and original form it was a gateway, and thus it functioned in the forbidden city.

China was a country of rivers and canals, and, therefore, the bridge was a frequent and often picturesque feature. Nine miles west of Peking was a bridge which had so many lions on its balustrades that persons were said to have gone mad trying to count them. It was commonly connected with Marco Polo, and it might be the successor to a bridge admiringly described by him. Another built for decorative purposes was the Hunch-back Bridge at the Summer Palace near Peking, high enough to allow the masts of the imperial barge to pass under it.

The proceedings terminated with a hearty vote of thanks to the lecturer.

SHEFFIELD SOCIETY OF ARCHITECTS, &c.

The bi-annual dinner of this Society was held on January 23 at the Royal Victoria Hotel, Sheffield, the President (Mr. C. M. Hadfield, F.R.I.B.A.) in the chair, and was attended by 71 members and guests, among whom were Mr. Walter Tapper, A.R.A., President of the R.I.B.A., the Lord Mayor (Alderman Harry Bolton, the Master Cutler), Mr. T. G. Sorby, and Lt.-Col. H. K. Stephenson, D.S.O., Pro-Chancellor of the University, as well as the Presidents of the Liverpool, Notts and Derby, West Yorkshire, and Yorks and East Yorks Societies.

The loyal toasts having been honoured, Major C. B. Flockton, F.R.I.B.A., proposing the toast of the City and Trade of Sheffield, said the city was suffering from two diseases: (1) the demobilisation of the armed forces of Europe and the Peace Pact, which had closed down their great staple industry, and (2) the canker of unemployment, which could only be remedied by a drastic surgical operation. Their huge public expenditure must be cut down and the burden of the rates lessened; they stood at such a figure now that new industries were prevented from coming into the city, old ones were being driven out, and those too firmly rooted to the soil were being crushed. He advocated enlarging the rateable value of the city, adding that he did not mean merely enlarging it on paper.

The Lord Mayor (Alderman Harry Bolton), responding, said he did not agree with the gloomy view Major Flockton took of the city. He thought, with many others, including the manufacturers, that they could see a silver lining to the cloud in 1929.

The Master Cutler (Mr. T. G. Sorby), also responding, said whether or not there were signs of improved trade, he thought they all hoped that the period of rationalisation would prove to be the forerunner of a state of things that would bring them a greater share of their home market and enlarge

their sales to the Dominions overseas as well as foreign countries.

Mr. Walter Tapper, A.R.A., P.R.I.B.A., proposing the toast of the Sheffield, South Yorkshire and District Society of Architects and Surveyors, asserted that whilst 200 years ago there was nothing ugly in the country, to-day there was vulgarity in a big sense, and he would rather have a public interested in architecture but with a wrong outlook than a public which was apathetic. So long as people were keen there was hope that their faces would be turned in the right direction, but if they were indifferent nothing could be done. We were sacrificing beauty and cleanliness for money-making, and we had darkened our skies, and especially in the north had blackened our countryside, in the eager pursuit of business, and to-day we were only beginning to realise the mischief we had done. An ugly city set in beautiful country was an abomination of desolation, and it was a serious thing for the country that men and women had no vision; the vulgarity of it all was paralysing. He believed that the civic conscience was now being roused to the seriousness of the matter, not only in Sheffield but in all industrial cities, and he thought that in the present century the developments would be in striking contrast to those of the nineteenth century. Societies of architects and other societies, such as the Birmingham Civic Society, would play a great part in stimulating and guiding the development in the right direction, but this must largely depend upon the awakening of public opinion in such matters. Referring to the Sheffield School of Architecture, the speaker said he knew of only one Society which had made sacrifices comparable to those of the Sheffield Society for the training of students. He had often read of large sums of money being left to the cause of science, but he had never read or heard of any large sum being left to further the cause of architecture; science was great, but so was art. He appealed to wealthy citizens to realise that art deserved its turn for support financially even as science had had its turn. He pleaded for a keener interest on the part of the public in art generally.

Mr. W. G. Buck, F.R.I.B.A. (Vice-President), replying to the toast, said an advisory panel in connection with the movement for the Preservation of Rural England had been formed in the city. Many European countries and the United States of America had for a long time had enactments under which the general design of proposed buildings was publicly controlled, and he suggested that one of the most important requirements was to impose a building line at least 80 ft., or better still 100 ft., from the centres of all roads in the country, and make this restriction apply to petrol pumps as well as buildings, and also, if possible, to advertisement boards. The speaker then referred to the forming of a separate society in Lincolnshire, remarking that Lincoln and Grimsby were the principal centres of population in the county, and although several of the smaller towns, such as Stamford and Spalding, would still be remote and have very little contact with a branch society with its headquarters at Lincoln, he thought it was natural that they should have more affinity for and interest in a county society than one having its headquarters in Nottingham or Sheffield, and he wished this youngest society every success in its inaugural labours. Concluding, the speaker mentioned the need for money to keep the Department of Architecture (which was doing very good work under an excellent lecturer) going at the University, and hoped that some time in the future some generous donor would bequeath to it a sum which would ensure its continuance as a permanency.

Lt.-Col. J. E. Knight, J.P., proposing the toast of "The Guests," said he would like to see a greater interest and recognition of architecture in the Press. For instance, in a new public building opened recently, how much space was devoted to a description of the ceremony, the names of the people attending, and the speeches, and how little was taken up with any proper description of the building, or any sympathetic criticism of its architecture. The name of the architect himself was seldom recorded and might not appear on the building.

Lt.-Col. H. K. Stephenson, J.P., responding, referred to the powers now vested in the Sheffield Corporation to control the design of buildings, and advised the Society to use its influence in urging those in authority to put these in operation and secure the nomination of the architect member of the contemplated tribunal.

A vote of thanks to the President and Council for their hospitality was moved by the Master Cutler (Mr. T. G. Sorby), and concluded the function.

SOUTH WALES INSTITUTE OF ARCHITECTS AND WELSH SCHOOL OF ARCHITECTURE

THE distribution of prizes to students of the South Wales Institute of Architects, Central (Cardiff) Branch, and the Welsh School of Architecture, Technical College, Cardiff, was made on January 31 by the Lord Mayor of Cardiff, Alderman W. R. Williams, J.P. Mr. C. S. Thomas, F.R.I.B.A., of Swansea (president of the South Wales Institute of Architects), presided over a gathering which included Alderman A. J. Howell (chairman of the Cardiff Technical Instruction Committee), Principal Charles Coles, Mr. T. Alwyn Lloyd, and Mr. W. S. Purchon (head of the school).

Mr. Purchon said that the most noteworthy event of the year was the fact that the school had received "final recognition" from the R.I.B.A. This exemption was of the greatest possible value to the school, allowing them to educate their students rather than coach them for external examinations, and it was a remarkable fact that it was won by the efforts of the school within about eight years after its foundation. No school of architecture in any other technical college had received that mark of approval. During the past few years eighteen students had qualified for the Associateship of the R.I.B.A., but they had aimed higher than that. They expected all their full-time students to obtain that distinction, and also expected that a proportion of them would compete for the leading awards in national competitions. The work of the school was largely based on the activities of the full-time students, but the part-time (day) courses were being found useful in helping those who were already articled pupils to obtain a more complete professional education and to pass the examinations of the R.I.B.A. They wanted a far larger proportion of pupils and assistants in South Wales to avail themselves of these facilities.

Alderman A. J. Howell, J.P., proposed a vote of thanks to the Lord Mayor and the chairman.

Mr. T. Alwyn Lloyd, F.R.I.B.A., seconded the motion.

Principal Charles Coles, in supporting said that the public did not realise what a first-class school they were endeavouring to make of the Welsh School of Architecture. He ventured to say that if there had been a Welsh School of Architecture in existence in Cardiff 60 or 70 years ago it would have saved the Cardiff Corporation hundreds and thousands of pounds. It was not now a question of "You cannot afford a school of architecture," but Cardiff and Wales could not afford to do without it. The Welsh University had its faculty of arts, but whilst recognising dead languages like Latin and Greek, the university authorities had not yet discovered that there was another very important practical and living art which ought to be recognised—the art of architecture. He sincerely hoped the Welsh University authorities would give the Welsh School of Architecture that which it fully deserved—full recognition and support.

The Chairman briefly replied.

Prefacing the list of awards, it was stated that during session 1927-28 the following successes were gained by students in the School of Architecture, in addition to the prizes presented by the Lord Mayor:—

Rome Scholarship in Architecture. Commendation in Final Competition.—James B. Wride.

R.I.B.A. Prize Competitions. Soane Medallion for Design. Certificate of Hon. Mention.—James B. Wride.

Special R.I.B.A. Fifth Year Maintenance Scholarship of £100 per annum (the successful candidate being selected from students nominated by the heads of all the leading Schools of Architecture in the United Kingdom).—Cyril J. Bartlett.

Successes gained at the Welsh National Eisteddfod. First Prize (value £10) for Measured Drawings—John W. Bishop. Highly Commended for Design—Francis K. Aitken, David Ellis.

The following student, having obtained the diploma of the school, subsequently passed the Professional Practice Examination of the R.I.B.A. qualifying for Associateship.—David J. Williams.

The following students have passed the Intermediate Examination of the R.I.B.A.—Arnold L. Birkett, Geoffrey L. Price.

Following is a list of the award of prizes, certificates and diplomas, session 1927-28:—

The Lord Mayor's Prize for Third Year Students (£2 2s.). Presented by Alderman A. J. Howell, J.P.—John W. Bishop.

President's Prize for First Year Students (£3 3s.). Presented by Mr. C. S. Thomas, F.R.I.B.A.—David M. Jones.

Second Prize (for First Year Work). Presented by the Head of the School.—William J. Davies.

The Prize for Draughtsmanship (£2 2s.). Presented by Mr. Percy Thomas, F.R.I.B.A.—Cyril J. Bartlett.

The Working Drawings Prize (£2 2s.).—Presented by Mr. Ivor Jones, A.R.I.B.A.—John W. Bishop; Leonard F. Richards.

The Prize for First Year Vacation Perspective (£2 2s.). Presented by Mr. T. Alwyn Lloyd, F.R.I.B.A.—Norman D. Ayres; William J. Davies.

The Architectural Sketching Prize (£2 2s.). Presented by Mr. H. Teather, F.R.I.B.A.—Hubert J. Hughes.

The Essay Prize (£2 2s.). Presented by the Architectural Press, Ltd.—John W. Bishop.

The Architectural Construction Prize (£2 2s.). Presented by Mr. H. Budgen, F.R.I.B.A.—John W. Bishop.

The Batsford Prize for Architectural History and Theory of Design (£2 2s.). Presented by Messrs. B. T. Batsford, Ltd.—Francis K. Aitken.

The Sketch Design Prize (£2 2s.). Presented by Mr. E. C. M. Willmott, A.R.I.B.A.—John W. Bishop.

Certificate in Architecture (carrying with it exemption from the R.I.B.A. Intermediate Examination):—Francis K. Aitken; John W. Bishop (with distinction); Frederick W. Honeywell; Arthur E. Jewell; John Lewis; Glyn P. Llewellyn; Leonard F. Richards; Carl A. E. Thatcher.

Diploma in Architecture (carrying with it, under special regulations, exemption from the R.I.B.A. Final Examination, with the exception of the subject Professional Practice):—Henry A. H. Bull.

Design: Second Year, £3 3s., John P. Ward; Design: Third Year, £1 11s. 6d., Francis K. Aitken; Design: Third Year, £1 11s 6d., John W Bishop; Design: Third Year, £1 11s. 6d., Frederick W. Honeywell; Design: Fourth Year, £2 2s., Cyril J. Bartlett; Design: Fourth Year, £2 2s., Olwen M. E. Price; Design: Fifth Year, £2 2s., Glyn P. Llewellyn; Measured Drawings, £5 5s., Leonard F. Richards.

DISTRICT SURVEYORS' ASSOCIATION

THE annual dinner of the District Surveyors' Association was held on Friday at the Hotel Victoria, W.C., with the President, Mr. A. A. Fillary in the chair. Supporting him were Lt.-Col. J. M. Moncrieff, Dr. Charles Porter, Sir Frank Baines, Major Vivian B. Rogers, Dr. R. E. Stradling, Major R. I. Tasker, Messrs. Ewart S. Andrews, W. H. Ansell, P. H. Adams, Louis Blanc, R. S. Bowers, Osmond Catlin, E. G. Culpin, W. R. Davidge, B. J. Dicksee, L. R. Ford, E. J. Elford, W. H. Duckworth, W. T. Cowper, W. Grellier, E. Stanley Hall, Stanley Hamp, Harley Heckford, A. W. Horsley, A. A. Hudson, George Lansdown, H. Morley Lawson, A. E. Marshall, E. J. Messent, Bruce Penny, R. F. A. Purkiss, W. E. Riley, Jacques Abady, R. Sheppard, Digby Solomon, G. Tolley, L. J. Veit, Septimus Warwick, W. H. White, Edward Willis, E. A. Wing, A. G. Morrice, O. C. Hills, P. J. Black, W. Hunt, T. Seager Berry, C. P. Courtenay, and T. Bullivant.

The loyal toasts being honoured, the toast of "The London County Council" was proposed by Mr. W. Grellier, who said that the L.C.C. and District Surveyors' Association were associated in many ways. District surveyors entered upon their duties by appointment from the L.C.C. That had not always been so, for time was when district surveyors were appointed by the magistrates. London then was governed by parish local boards, but later it was found that it wanted some body who would manage London generally. In 1855 the Metropolitan Board of Works was brought into being, supposed to be composed of delegates from each local board, and the appointment of district surveyors was put in their hands. The M.B.W. had many duties, ranging from main sewers to tramways, but their chief memorial was the Embankment. Later on, in 1888, the London County Council was formed and took over the Board's duties, including the School Board and the Building Act. He was glad to see that so many officers of the Council were with them that night, and he was glad to say that one received every attention from those at the County Hall. He had always found that members of the L.C.C. would take infinite trouble to put anyone on the right way.

Major R. I. Tasker, L.C.C., in response, said that one, at least, of the duties of a County Councillor was not all beer and skittles; that was, to serve on the Building Act Committee. But those on that Committee had the greatest regard for the district surveyors who, among other things, had to have a combination of the wisdom of Plato, Demosthenes and Socrates, the organisation of a Hannibal or a Napoleon, the learning of a Shakespeare, the constructive knowledge of Michael Angelo and Kirkcaldy and the patience of Job! He would take the opportunity to say that the cause of the district surveyors was never more strongly supported than it had been by their President and Mr. Tolley. He spoke with regard to the revision of the district surveyor's fees. After considering the features of the new scale of fees, he felt that it was an honest attempt to give justice, for the old scale was not altogether satisfactory. A building owner might put up a building costing £100,000 and yet the surveyor's fees be but a sovereign.

District surveyors occupied a very responsible position and he would express a hope that they would keep on the move and keep abreast with the times, especially with regard to the developments in the use of steel-frame construction and ferro-concrete. Both the London County Council and the District Surveyors' Association were imbued with the desire to do right and justice to the people of London.

Mr. E. Stanley Hall, V.-P.R.I.B.A., giving the toast of "The District Surveyors' Association," said he was glad to meet fellow-architects, from whom he had received so much help and so much kindness. That spirit of help and co-operation had existed throughout the 84 years that the Association had been founded. It had been his privilege to be associated with such men as Henry Lovegrove, Crowe and Hill, and he felt that as long as the Association had men of such standing as those there was no need to worry.

The President, replying, said that district surveyors were proud of their ancient and honourable position. Previous to 1854 they were known as "Supervisors." They were proud of the active and important part they had played in the building of London's great city, and especially in the rebuilding schemes since the war. Before the war, district surveyors were allowed private practices, but they realised that conditions of structure in the building trades had made that impossible. Speaking of the surveyors' qualifications, he said that they not only had to combine the professions of architect, surveyor and builder—with a bit of the lawyer thrown in—but also of constructional engineer. In recent years, their work had increased immensely, for, thanks to the L.C.C. Building Acts for 1908 and 1909, such an impetus was given to building as never before was known. In addition, the district surveyor had to be ready to deal with every emergency, such as thunderbolts, tornados, or gas explosions. The Council had tried to obtain uniformity of practice, and surveyors had always endeavoured to give a commonsense application of the Building Act and had applied the process of bending, though never breaking, the law that had been put in their hands to administrate.

Mr. G. Tolley proposed the toast of "The Guests," who, he said, included many who were distinguished as architects, constructional engineers, builders and, not the least, the legal interests who assisted surveyors in their efforts to better London. He was glad to welcome them and hoped he would have the privilege of doing so again many times in the future.

Mr. Frank Rye, M.P., Mr. A. A. Hudson, and Mr. Ewart G. Culpin replied. Mr. Culpin said that through the examinations which they had conducted on the question of the alteration in fees, the L.C.C. had given justice to the best of their ability. But it had not to be forgotten that they had to consider the interests of 4½ millions besides.

Architects' and Surveyors' Approved Society.

The annual general meeting of this society was held on January 24, at the Surveyors' Institution. The following gentlemen were elected to the Committee of Management for 1929-1930:—Mr. A. Goddard, C.B.E., Mr. R. G. Strachan, F.S.I. (representing the Surveyors' Institution); Mr. H. D. Searles-Wood, F.R.I.B.A., Mr. Ian MacAlister, Mr. Herbert Shepherd, F.R.I.B.A. (representing the R.I.B.A.); Mr. F. R. Yerbury (representing the Architectural Association); Mr. O. H. Cooke, M.C., M.A., Mr. J. W. Denington, L.R.I.B.A. (representing the Association of Architects, Surveyors, and Technical Assistants); Mr. W. J. D. Import, F.A.I., Mr. John Mitchell, Mr. A. A. Beckham, Mr. Arthur Scandrett, Mr. Albert Knight, Mr. Hubert Worley, Mr. P. Scott Martin. Mr. A. Goddard was re-elected as Chairman, and Mr. Searles-Wood as treasurer.

After a resolution had been passed unanimously thanking the Press and those institutions who had given the society publicity, the chairman, in the course of a speech, pointed out the advantages of insuring through the society. Those already insured through other societies, he said, or through the Post Office, could be transferred to the Architects' and Surveyors' Society from the commencement of each half-year in January and July; at least eight weeks' notice of desire to transfer must be sent beforehand on the prescribed form. The secretary would always be pleased to advise intending members, to supply the necessary forms, and to give any further information regarding the Architects' and Surveyors' Approved Society, the address of which is 26, Buckingham Gate, London, S.W.1.

The proceedings terminated with a vote of thanks to the Council of the Surveyors' Institution for their kindness in providing tea and in allowing the meeting to be held at the Institution.

THE WEEK IN PARLIAMENT

WESTMINSTER, *Wednesday.*

Houses Built.

Mr. Chamberlain informed Sir J. Power that the numbers of houses completed under the Housing Acts, 1923 and 1924, during the last three months of 1928 and 1927 were 26,858 and 24,300 respectively.

Assessments.

Sir J. Nall asked the Minister of Health whether he was aware of the position arising under the Rating and Valuation Act, 1925, whereby occupiers having been required to give particulars of their property received no written notice of their new assessment; that the provisions of the Act regarding notices of appeal against assessments in the draft lists and the period within which appeals might be lodged were being differently interpreted by various authorities; that, owing to the absence of written notices of assessment, many occupiers would be unaware of increased assessments until they received demand notes for rates, by which time it would be too late to appeal against the assessment; and whether, in order to clarify the procedure and preserve the right of appeal to occupiers, he would take steps to provide for written notice of assessment being served upon every occupier affected by a revised assessment.

Mr. Chamberlain said that under the Rating and Valuation Act, 1925, as amended by the Rating and Valuation Act, 1928, it was not necessary to notify an individual occupier of an increase of his assessment. The position in that respect was the same as it was under the general law formerly in force in England and Wales (outside London). If an occupier who was aggrieved by any incorrectness or unfairness in the draft valuation list, as deposited, omitted to lodge an objection thereto within the prescribed time, it was still open to him to make a proposal for the amendment of the approved list after it had come into force. Any such proposal must be considered and determined by the Assessment Committee in the same way as if it were an objection to the draft list, and the decision on the proposal would operate from the beginning of the rating period in which the proposal was made. In the circumstances, he did not consider that there was any necessity for an alteration of the existing statutory provisions.

Subsidy Houses.

In answer to Sir W. de Frece, Mr. Chamberlain said that the number of subsidy houses built in England and Wales during the year ended December 31, 1928, was 104,335, of which 46,628 were built by private enterprise. In addition, there were 64,624 houses built by private enterprise without State assistance during the twelve months ended September 30.

Houses Built.

Captain Margesson informed Mr. Wardlaw-Milne that 372,004 houses had been completed under the Housing Act, 1923, and 222,643 under the Act of 1924 up to December 31 last. The average prices of non-parlour and parlour houses included in contracts let by, or in direct labour schemes of, local authorities under the two Acts during the quarter ended December 31 last were £354 and £424 respectively.

ARCHITECTS' & BUILDERS' INQUIRY BUREAU

We are glad to give questions and answers, but cannot accept responsibility for contributed replies, especially on legal matters.

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as lightly as possible, or, better still, in typewriting!—ED.

Gauged Mortar.

[REPLIES TO "PRACTICE," FEBRUARY 1.]

SIR,—The effect of adding cement to lime mortar is to make it set harder and to hold to the work more tenaciously. Lime alone has very little setting strength, i.e., when set it is very easily crushed, whereas cement has great setting strength and resists great crushing strengths. Cement can be mixed with lime in any proportion, and the more cement the harder the set, provided the stuff is used before the setting process of the cement is exhausted. When the materials are mixed thoroughly there is, I should say, no independent setting. F. PALMER.

SIR,—There are no records of experiments to show what is the actual effect upon the setting of mortar, if gauged with cement, but results go to show very little difference in the setting process of this and cement mortar. There is a theory that the crystalline action of the setting of cement produces very long interlacing crystals, which form in much the same way when this is only a gauging, but there are no experiments so far as I know that can support this theory.
H20.

Bridging.

[REPLIES TO "STUDENT," FEBRUARY 1.]

SIR,—Bridging has the effect of strengthening and fixing joists at a point where they are weak and unsteady, and where ceilings under would otherwise become wavy and cracked. Herringbone bridging has the advantage over solid bridging in that it takes only about a fourth of the material, is done in rather less time, and is much easier to fit tightly (which is important). Herringbone bridging properly fixed tends to tighten up and become more effective as the joists shrink, whereas with solid bridging the opposite is the case, as shrinkage leaves it loose and less effective. "Student" can easily put this to the test by setting out his joists on paper with bridging inserted and then shrink his joists, and the thing is quite obvious.
F. PALMER.

SIR,—Bridging serves a dual purpose: (1) to resist and strengthen against the twisting tendency towards the centre of a joist of long span, and (2) to spread loads over a number of joists that would otherwise concentrate on one. Herringbone is the best principle, as it is extremely difficult to saw solid bridging so accurately as to ensure a firm bearing in each case top and bottom.
X.

Steelwork in London Buildings.

SIR,—(1) How many tons of steel girders or joists were used in the construction of the Piccadilly-circus tube station, and was there some difficulty in getting one of these joists (or girders) into position owing to its length? (2) Are steel girders or joists being used in the construction of the Bank of England, Threadneedle-street, E.C.? J. H.

[(1) We are informed by the Underground Railway that 950 tons of steelwork were used in the construction of Piccadilly-circus station, all of which had to be passed through a comparatively small hole in the roadway. (2) Yes.—ED.]

Mechanical Water Diviner.

SIR,—Is there such a thing as a mechanical instrument for water finding? H. T. H.

Sound-proof Floor: Steel Shafts.

SIR,—The writer would appreciate any information as to the best form of sound-proof floor to adopt in the building of a block of flats, also a reference to manufacturers making steel shafts with special dust-proof traps, for the removal of ashes and garbage. P. Q.

Worm Holes in Furniture.

SIR,—A piece of walnut furniture has been attacked by some insect, leaving several holes in the wood. Into these holes I have injected a liquid which seems to have had the desired effect, but the holes are a disfigurement. What material could I fill the holes with? M. D. P.

Chimney Stack Problem.

[REPLIES TO "INQUIRERS," JANUARY 18.]

SIR,—It would appear from "Inquirers'" letter and sketch that they intend to replace the existing Cornish boiler by a larger boiler of the Lancashire type, of size 30 ft. long by 8 ft. diameter. My reason for this assumption is assisted by "Inquirers'" sketch, which indicates a single furnace for the old "Lancashire" boiler and double furnaces for the new "Cornish." This, of course, is quite the reverse.

For the purpose of trying to assist "Inquirers," I am taking for the basis of my calculations a Lancashire boiler 30 ft. long by 8 ft. diameter, with the following capacities:—Heating surface, 1,000 sq. ft.; normal grate area, 38 sq. ft. Coal burnt per sq. ft. of grate per hour: 20 lb., 25 lb., 30 lb. Steam evaporated per hour in lb.: 6,100 lb., 7,600 lb., 9,100 lb.

This is assuming 8 lb. of water evaporated by 1 lb. of coal, the boiler being supplied with hot feed water. Taking the average evaporation at 7,600 lb. per hour, "Inquirers" will require a chimney shaft 95 ft. high with an internal diameter of 42 in. or a square of 38 in. side. From this it is quite useless to attempt to increase the height of the existing 2 ft. square stack from 48 ft. to 68 ft., because even at 70 ft. a 24 in. square stack has only an evaporation capacity of 2,400 lb. per hour.

Disregarding the dangers of increasing the height of any existing brick shaft, I would advise "Inquirers" to construct a new shaft of the dimensions given. Personally, I favour a round steel shaft of the self-supporting type (i.e., without supporting guys) with weather joints, the bottom being belled out for increased stability and fire-brick lined to a height of about 20 ft. when first cost is a consideration. A shaft constructed in this manner with no plate less than 5/16 in. thick and painted externally with black bitumastic paint annually should last at least 15 years. A brick shaft is expensive at the outset, but if properly constructed, the maintenance should be very small. If the ground has a poor bearing capacity, a steel shaft has distinct advantages.
GERALD J. GILLESPIE, A.I.A.A.

SIR,—Any advice upon this matter based on the meagre particulars given, and without a careful survey of conditions on the spot, would be misleading and unreliable. Your correspondent should seek the advice of an architect on the spot. ARCHITECT.

Damp Walls.

[REPLIES TO "H. R. M.," JANUARY 25.]

SIR,—It is but a makeshift job to treat these walls by any internal application, and, before doing more, get a practical master builder to investigate and specify or apply the remedy. A good waterproofing liquid would have done the trick had this been merely what was wanted. Causes of dampness are many and varied, and without full information on the whole situation it is idle to attempt to specify a cure. The plaster crumbling simply shows the wall is saturated. It would be wise to allow at least six months to pass before repapering. F. PALMER.

SIR,—It is difficult to ascribe the cause of the damp patch without a visit to the site, but it would appear likely that the wall becomes soaked by the splashings up from the lean-to roof. If so, the wall over same on the outside should be waterproofed. This may drive the moisture through to the inside, and it should be given time to dry out before the inside plastering and decorations are renewed. CHERCHER.

Condensation in Plastered Walls.

[REPLY TO "SURVEYOR," JANUARY 25.]

SIR,—Your correspondent "Surveyor," in his answer to "Rexor's" query, mentions that the quality of bricks which he has seen uncovered when searching for the causes of dampness varies considerably, and suggests that the saline matter may come from the bricks. This rather confirms my own belief that the efflorescence generally found when cement mortar is used, and not with lime mortar, comes from the bricks, and not from the cement. I think this is because the salty efflorescence driven off from the bricks is absorbed by the porous lime mortar, but has to find its way out by the face, when the mortar is more or less impervious. I would like to hear other opinions upon this point.
ARCHITECT.

Frost.

[REPLY TO "THAW," JANUARY 25.]

SIR,—Frost can do irreparable damage to brickwork in lime mortar, but if the mortar is gauged fairly heavily with cement when frost is about, the setting is hastened, and any lifting that may take place is likely to be on the upper courses, where they can be easily replaced. If the wall is not driven out of shape, the setting will continue normally after a thaw. GAUGE.

What is a Mutual Wall?

[REPLIES TO "X. Y. Z.," JANUARY 25.]

SIR,—As the term implies, this is what is commonly known as a party wall, i.e., a wall of which the two adjoining owners are tenants in common. At Common Law, the term may mean (1) a wall divided longitudinally with two strips, one belonging to each of the neighbouring owners, or (2) a wall which belongs entirely to one of the adjoining owners, but is subject to an easement or right on the other to have it maintained as a dividing wall between the two tenements, or (3) a wall divided longitudinally into two moieties, each moiety being subject to a cross easement in favour of the owner of the other moiety.

The rule of Common Law seems to be that the adjoining owners must maintain and contribute to the repair of the wall to the extent and in proportion to the use made of it by each of them. Much depends on contract—express or implied—or on the custom of the locality.

Outside London there is no Statute law regarding party-walls, though the by-laws of the local authority, made under section 157 of the Public Health Act, 1875, may affect them.

In London party-walls are subject to the provisions of the London Building Act, 1894. Under section 5 (16) a party-wall means (1) a wall forming part of a building and used or constructed to be used for separation of adjoining buildings belonging to different owners or occupied or constructed or adapted to be occupied by different persons, or (2) a wall forming part of a building and standing to a greater extent than the projection of the footings on lands of different owners.

Generally, expenses as to party-walls under that Act are to be borne jointly in due proportion, regard being had to the use that each owner makes or may make of the structure. WALL.

SIR,—I have not heard the term previously, but presume it means the same as "party wall," which your correspondent defines correctly. PRACTICE.

Proposed New Open Space for London.

Woolwich Borough Council has decided to contribute £1,000 towards the acquisition of Lessness Abbey Farm, Abbey Wood, for an open space. The property, comprising about 215 acres, includes the remains of Lessness Abbey, which is said to have been founded in 1178. The estimated cost of the acquisition is £20,000.

THE BUILDING TRADE

ROAD CHARGES—I

UNDER this heading in a leading article in our issue for December 21, we referred in general terms to the check to building operations and the hardships imposed upon individuals by the system under which private streets laid out on building estates are eventually converted into roads repairable by the inhabitants at large at the cost of a limited class, viz., the owners of houses having a frontage upon those streets; and we pointed out that it was questionable whether the cost of developing a district should be wholly placed upon individual owners, who are also ratepayers contributing to all other roads, especially when before being taken over by the local authority these streets have become subject to a general user of such a kind that they have virtually become thoroughfares used by the ratepayers at large, an outside user which often necessitates these streets being made up to a standard and at a cost which none of the frontagers can have had any reason to contemplate.

The questions thus raised are of such paramount importance that we propose to consider them here in greater detail as legislation on the subject is urgently required, and in the first place we propose to show that the existing legislation does not meet modern requirements. At the time the legislation was passed, under which private streets are made up preparatory to their being taken over by the local authorities, that is to say the Public Health Act, 1875, or the Private Street Works Act, 1892, very different conditions prevailed in the development of building estates. Before the war it was the exception and not the rule for persons to purchase houses on those estates which were laid out by the owners, the houses then being very generally leased to tenants on tenancies of 7, 14 and 21 years, the ownership remaining vested in the owners of the estate. In such cases the owners of the estate, who were responsible for the original lay out and formation of the streets or roads, remained liable when the local authorities decided to take them over under the above Acts, for although under those Acts the occupier can be served with the notices, it is the "owner" who is liable to pay the expenses when the work has been executed. Thus, when these estates were held by the owners who laid them out and made their profits from the rents, there was no hardship, for if in the initial stage of laying the estates out they had scamped the making of the roads, when the time came for the roads to be taken over it was they who had to make them good to the satisfaction of the local authorities under the Public Health Act, 1875, or to pay the expenses incurred by the authorities under that Act, or the Private Street Works Act, 1892, and the leasehold frontagers had no liability.

Since the war, with the consequent shortage of houses, conditions have changed. Building estates have been laid out with roads imperfectly constructed, unless the by-laws in force required them to be constructed of a certain standard, and the Committee on Building By-laws found that very few such by-laws were in force, and as soon as the houses were erected they were sold one by one to purchasers, as the Rent Acts deterred owners of estates from offering them on tenancies, and the continuous building operations as the estates continued to be developed wore out the original badly constructed roads, and thus each several frontager owner has become liable for making them good at heavy cost when the local authorities decide to take them over, and hence the frontagers have become liable for the development of the estates in this particular. There are, of course, cases where estates have been developed on building agreements under which the ownership of the houses passes as soon as the house is completed, and there is the case, which in our leading article we characterised as the hardest of all, where owners of established houses became liable for a road laid out along their frontage on a neighbouring estate, but at the moment we are dealing with such estates as we have indicated above, where the ownership of the estate remained in the developing owner and he leased the houses.

The Departmental Committee appointed in 1914 to consider by-laws relating to the erection of buildings and the construction of streets did not issue its Report until 1918, but even then the present condition of affairs had not arisen to such a great extent, and as we pointed out in our articles in 1927, it appears to be assumed in the Report that the cost of laying out the streets and making them up to be taken over by the local authorities will fall upon the same person, viz., the developing owner. Thus, in paragraph 62, in discussing whether construction at the laying-out stage should be required, the Committee said: "It was alleged in evidence that local authorities, in determining whether they will assume responsibility for the maintenance of existing streets, and what conditions shall be imposed if they decide to do so, frequently insist upon conditions more onerous than circumstances warrant, that is to say, that in order to satisfy a particular authority's own preference, or for the sake of saving comparatively small sums in annual maintenance, a local authority may require an estate owner to go to a capital outlay of disproportionate amount; and, secondly, that when a building estate is laid out, the authority will not always give information as to the conditions on which they will ultimately assume responsibility for the streets; and, thirdly, that even when information has been given, the developing owner has sometimes incurred expenditure in the construction of the roadway on the faith of the local authority's statement, only to find, after some few years, that the specification has been changed and that he is required, if he wishes to have the street taken over, to remove perfectly good work on which he has spent large sums of money, and to do it again on a more expensive or different scale." This passage clearly shows that the Committee assumed the developing owner would remain liable, and although they expressed themselves unable to say how far these allegations were proved, it is common knowledge that there is evidence to support them, and if such conditions bear hardly on the developing owner they work far more injustice to the purchaser of a single house on the estate, who has had nothing to do with the neglect shown in the laying-out stage and who derives no profit from the development of the estate.

The Committee pointed out that the majority of the by-laws go no further than to define the proportions of the carriage-way and foot-ways, the height of the kerb, etc., and that very few authorities require constructional work at the initial stage, although some authorities had altered the model clauses to that effect, and it was suggested that the omission of provisions as to construction was perhaps accounted for because there was no guarantee that work done at that stage would not be destroyed in the course of the building operations.

This emphasises the point we have endeavoured to make above, viz., that the owner who makes a profit out of the development of his building estate escapes the construction of the roads, and now that he sells the houses one by one, pushes the whole of that cost over upon the purchasers of the individual houses, although in his building operations it is he who is taking the chief wear out of the roads. The roads, as superficially made up, have the appearance to the uninitiated of being good roads, and the purchaser, when buying a single house, has no idea that the roads have no real foundations and that the eventual making-up of the roads will fall upon him; thus the developing owner obtains a price which should include the making-up of the roads, although in fact that is a charge which the purchaser eventually discovers has been left to be imposed upon him.

It is a remarkable fact that in their report the Committee said that if the owner of the street was not prepared to do the work required for taking over, the alternative was for him to continue responsible for the condition of the street, but the frontagers on the street, at any rate, have no such alternative, and when the local authority decide to take over a street they are compellable by law to pay the charges.

The Committee recommended that clauses in by-laws should, so far as is practicable, include provisions to secure that at the laying-out stage some constructional work should be done, and that in connection with taking over streets the local authorities should formulate in advance a maximum specification or specifications, on compliance with which they will take over new streets, such specifications to be approved by the Minister of Health, and that the local authorities should not be allowed at the stage of taking over to require the destruction of work executed in accordance with the by-laws, or with such specifications at the stage of taking over still in good condition, and that an appeal should be given on this latter question. The remedy to the above hardships is suggested by these recommendations as we now propose to show.

In the case of the individual frontager owner, when the road is made up preparatory to being taken over, the cost of making it up becomes a charge upon the premises, and however long a time may have elapsed between the purchase of his house and the taking over of the road, this attaches at the time when the works are completed.

If the above recommendations were adopted the character and construction of the roads would be able to be determined from the earliest stage and an estimate of the cost of making them up could very fairly accurately be made, and it does not appear impossible that the cost of the roads so estimated should be made a charge upon the estate, and that this charge should be registered under the Land Charges Act, 1925, and in this way purchasers of houses on the estates would be able to get an approximate idea of the liability they would incur in respect of the roads, and both vendor and purchaser would have to take account of this when fixing the price to be paid for houses. This system would at least drive the pig-in-the-poke out of the market.

The changes in the law to effect this object would be trifling. In the first place, section 157 of the Public Health Act, 1875, seems drawn in terms wide enough to permit of by-laws being made relating to the construction of streets at the laying-out stage as it authorises by-laws for "the level width and *construction*." Secondly, the Public Health Acts would have to be amended to embrace the recommendations of the Committee that specifications should be formulated in advance relating to the taking over stage and as to the retention of existing work, and lastly, the estimated charge of reconstruction on taking over based on these specifications should be made a charge upon the estate requiring registration under the Land Charges Act. We venture to think that this suggestion is by no means an im-

practicable one, and that it would remedy one of the hardships instanced in our leading article, in that it would remove "that unknown charge that hangs over the heads of property owners who are unfortunate enough to have entered into possession before road charges have been settled up."

In a second article we shall endeavour to show how other present hardships could be removed by slight amendments in the law.

RENT RESTRICTION DECONTROL

SINCE in our Legal Section for January we noted the five cases relating to decontrol under the Rent Acts, a point has arisen before a Divisional Court in the case Kingsley *v.* Adler (*Weekly Notes*, January 26) which the court characterised as a new point and which is not directly covered by those decisions. The case turned upon the second subsection of section 2 of the Act of 1923, which is as follows:—"Where at any time after the passing of this Act (July 31, 1923) the landlord of a dwelling-house to which the principal Act applies grants to a tenant a valid lease of the dwelling-house for a term ending at some date after June 24, 1926" (a date for which has been substituted a provision "not earlier than one year after the date fixed, at the time at which the lease is granted, for the expiration of the principal Act (see Rent and Mortgage Interest (Restrictions Continuation) Act, 1925, section 1, subs. (3) (b))," being a term of not less than two years, or enters into a valid agreement with the tenant for a tenancy of such a term, the principal Act shall as from the commencement of the term cease to apply to the dwelling-house, and nothing in the principal Act shall be taken as preventing or invalidating the payment of any agreed sum as part of the consideration for such lease or agreement."

The only point directly decided by the Court of Appeal under this subsection was, as we stated in our former article, that the "tenant" named in the subsection must be an existing tenant at the time the lease is granted, and that the section does not apply to a new tenant. (Bartram *v.* Brown, 1929, 1 K.B. 103.) The facts of the case before the Divisional Court appear to have been that in 1919 the plaintiff had bought an eight-roomed house which was within the Rent Acts; thus it will be seen he was an owner "landlord." On October 11, 1920, he let the whole house to the defendant for three years from September 25. In September, 1923, at the end of the above lease, the plaintiff demanded possession, and subsequently commenced an action to obtain this. That action was settled by an agreement made between the parties dated July 25, 1924, under which the plaintiff took possession of two rooms, but granted the defendant a new lease of six rooms in the house for 104 weeks. When the above lease for two years came to an end the plaintiff claimed possession of the six rooms, and contended that they were decontrolled by virtue of the tenancy granted July 25, 1924. The County Court judge held that the subsection did not apply because the tenant at the time the lease was granted had only been tenant of the whole house and not a tenant of the dwelling-house constituted by the six rooms now in question. The Divisional Court reversed this judgment, apparently on the ground that as in the recent cases Lloyd *v.* Cook and four other cases in the Court of Appeal, it had been held that a "landlord" does not for the purposes of subsection (1) denote a person having a tenant under him, but includes a person suing as landlord in respect of the dwelling-house the subject-matter of the dispute the plaintiff here was a landlord of the six rooms constituting a dwelling-house under the principal Act who had granted a valid lease of the length required by the subsection to the tenant, and thus the rooms were decontrolled by virtue of subsection (2). The case, as at present reported, is rather difficult to follow. The plaintiff, being the owner of the house, the question would appear to be not so much whether he was a "landlord" within the meaning of the subsection but whether the tenant was a "tenant" within the limits recently laid down by the Court of Appeal in Bartram *v.* Brown.

The question of possession does not arise under subsection (2) in considering the point as to decontrol, for it is not possession by the landlord that gives decontrol (except that he must be a person in a position to grant a lease) but the granting of a lease of a certain length to a person who is a "tenant" within the subsection as interpreted by the Court of Appeal. Now the position of the parties here seems to have been that the plaintiff as an "owner landlord" could undoubtedly grant a lease. The defendant was, immediately before the granting of the lease at the material date, that is, July 25, 1924, a statutory tenant of the whole house. Pausing here, it may be said that a statutory tenant clearly falls within the subsection, for Lord Justice Greer, in the cases before the Court of Appeal, pointed out that the word "landlord" in section 5 of the Rent Act, 1920, cannot be used in its ordinary sense as denoting a contractual landlord, for the person claiming possession after a tenancy has ceased is not a contractual landlord, and he described such a person as "an ex-landlord," or, in other words, a "statutory landlord."

The landlord here was never in possession of the whole house, for the statutory tenant was in occupation of the whole house until the action was settled by the agreement dated July 25, 1924, and under that agreement a fresh tenancy was created, not of the whole house but of a different "dwelling house," six rooms. The point thus arises, was such a letting of part of a house to a tenant who had been in occupation of the whole a letting under the subsection to a "tenant" under the subsection as laid down by the Court of Appeal. Lord Justice Scrutton, in Bartram *v.* Brown, said the tenant must not be "a new tenant," whilst Lord Justice Sankey, put the matter thus: "The word 'tenant' in subsection (2) must, in my view, refer to the particular person who is the tenant at the time when the lease referred to in the subsection is granted and to no other person." If the nature of the house the subject matter of the former tenancy is changed, as here, does the tenant still answer the above description? The Divisional Court has answered this question in the affirmative, but leave to appeal was granted. The case does not seem to be directly governed by anything said in the five cases by the Court of Appeal, for this question as to whether the granting of a lease of part of a house to the sitting tenant of the whole is within the subsection, is entirely distinct from the point decided in Lloyd *v.* Cook, that when a landlord has once come into possession of a whole house after July 31, 1923, the whole house is entirely decontrolled and the Rent Acts do not again attach to parts which he may subsequently let separately. The opinion of the Court of Appeal will be welcome on the points raised in this case.

COLOUR IN CONCRETE

An exhibition showing permanent colour in concrete has been opened by Mr. F. E. Doran at 42, Deansgate, Manchester. The exhibition is very comprehensive, showing a wide range of spars, granites, and other natural aggregates; some methods of pigmentation; castings and slabs illustrating exposed surfaces by tooling and chemical methods; a large collection of photographs (some of them in colour) indicating developments in work of this description. One of the most useful sections is the bibliography relating to concrete with particular reference to colour in concrete. It is intended that the exhibition shall be a permanent one with the books of reference and specimens available for all who are earnestly interested.

LAW REPORT

Question of Goodwill.

A CASE of interest to shopkeepers who hold their premises upon lease, and one which involved an intricate goodwill problem under the Landlord and Tenant Act, 1927, was heard recently by his Honour Judge Higgins at Torquay County Court. It was a claim by George William Bradshaw, a Union-street shopkeeper, against Richard J. Williams, shopfitter, St. Gevards, Torquay, for a new lease of £2,000 compensation in respect of the premises, 58, Union-street.

The action was the first one to be taken locally under the new Act, and the claim had been the subject of an arbitration, conducted by Mr. J. F. Bowden, of Exeter, a member of the panel of arbitrators appointed under the Act. The judge was now asked to confirm the arbitrator's award, which was to the effect that Mr. Bradshaw had failed to show that by reason of the carrying on by him and his predecessors in title at the premises of a trade or business for a period of not less than five years, goodwill had become attached to the premises so that they could be let at a higher rent than they would otherwise have realised. There was a counter claim for £230 for dilapidations, and the arbitrator decided that this did not arise until the end of the present lease.

In the result the arbitrator's award was confirmed by the judge.

BOOK REVIEWS

Rating of Machinery and Plant. By JOHN SCOTT HENDERSON, B.Sc., Barrister-at-Law. London: "Rating and Income Tax," 1, Dr. Johnson's buildings, Temple, E.C., and Argus Press, Ltd., Tudor-street and Temple-avenue, E.C. Price 5s. net.

The Law of Rating of Machinery and Plant was put on an entirely different basis by the Rating and Valuation Act, 1925, and will be further altered by the Rating Relief proposals before Parliament. Therefore a book dealing with the new law and the special procedure set up to decide disputes as to what is rateable machinery (and there will be tens of thousands of them) must necessarily be welcome to all users of machinery, rating officials and rating surveyors throughout the country. Mr. J. Scott Henderson, Barrister-at-Law, has compressed a large amount of information into a small cloth-bound book, which makes it clear that the Government's proposals do not by any means amount to the de-rating of machinery, and that opposition of various kinds may have to be surmounted before machinery escapes any rating at all. The rights of the ratepayer are indicated, and the book contains a list of all Statutory Orders relating to machinery, and a list of the referees appointed to arbitrate in disputes.

Structural Engineering. By J. HUSBAND, M.Inst.C.E., and WM. HARBY. Fourth Edition. London: Longmans, Green & Co. 1928. 16s. net.

This is a new edition of a well-known and very useful work, and is of particular value because it bridges the gap between the strictly academic and the severely practical treatment of structural design. It omits the problem of the rigid, two-hinged metal arch and the suspension type of bridge, although the London University engineering examination includes these subjects. In the third edition a chapter on influence line was inserted quite late in the book, and we would suggest that the proper place would have been between Chapters III. and IV. This very powerful method of determining the position and magnitude of maximum bending moments, shear forces, etc., produced by moving loads, surely should be placed before the calculations arising in the process of designing beams, plate girders, etc. We have no hesitation in commending this book to the notice of students of structural engineering.

NATIONAL FEDERATION OF BUILDING TRADES

Glass and the Sun.

A LECTURE on this subject was given in the Y.M.C.A., Tottenham Court-road, on January 30 to the National Federation of Building Trades Employers by Mr. B. M. Conybeare. After some introductory remarks on the nature of light in general, the lecturer said that what we really got through ordinary glass was a skimmed sunlight from which the cream had been taken off, but through vitaglass we had the whole lot. A skimmed sun was bad for human beings. There was a property known as ergosterol in the skin which absorbed the ultra-violet rays of the sun, and that became a source of Vitamin D, which was absolutely essential to life, because unless we got sufficient of that we did not absorb calcium, however much we got in our food. Calcium was essential to life and bone formation, and every activity our life carried on.

Vitamin D was present in some foods, but it was not sufficient in quantity in ordinary foods. In what quantity were these rays available through vitaglass? Ordinary window glass when first fitted underwent a slight change, and that change was sterilisation, but after a time that change became stationary. In the case of vitaglass that change was soon complete, and vitaglass would continue to transmit all the ultra-violet rays of the sun which ordinary glass stopped. Ordinary window glass had a fair metal content, especially of iron. One might have an amount of iron in glass which did not interfere with the rays, but in vitaglass one had got metal absolutely at a minimum, so that the ultra-violet rays came through, and that was one of the important and essential differences between vitaglass and ordinary glass. Vitaglass, when fully sterilised, had got a very high percentage of these rays.

One or two points about vitaglass were constantly raised. One was whether the rays had a bad effect on the sight. We could really say that vitaglass was sheltered sun, and the answer to that question was "No." Another question asked was whether vitaglass allowed heat waves through. They had tests actually carried out at a London research building station, and it was reported that no difference whatever in heat transmission through vitaglass could be found. Probably people said it passed more heat, but this was almost certainly the effect of a certain amount of ultra-violet rays stimulating the skin and probably giving one a sense of heat, and it was probably the ultra-violet rays having this effect and not the heat waves. In the new building of the Imperial Chemical Industries an enormous amount of vitaglass was used. They had just had a report from a Folkestone hospital in which instead of ordinary glass vitaglass had been used. It passed the greater part of the ultra-violet rays present in sunshine, and the officials had observed an improvement in the spirits of the patients, who had put on flesh, and whose wounds, hitherto sluggish, had healed up. A factory in Lancashire had a great deal of vitaglass, and its records showed that there had been a greater percentage of production since its installation.

Municipal Buildings, Harrogate.

Harrogate Town Council has instructed the Borough Engineer to prepare detailed estimates of the cost of alterations according to a scheme which provides for housing all the Corporation Departments (with the exception of the Treasurer's) on the site of the Victoria Baths, at a cost of £28,000. A Council chamber, committee room, etc., are to be included.

NUISANCE FROM VIBRATION & NOISE

As we have had cause recently to note cases relating to nuisances occasioned in pursuance of statutory powers, but temporary in their nature as arising in connection with such works as pulling down a house in a town or city or in preparing a site, we may refer to a recent case, Cherry v. London Electric Railway Co., reported in the "Times," January 26.

This was a motion to obtain an interlocutory order for an injunction restraining the defendants from causing a nuisance from vibration and noise at night in the construction of an escalator, brought by the lessee of a shop with dwelling rooms above with 14 years of the lease to run, in 180, High-street, Camden Town. The plaintiff complained that the work was continued without cessation except between noon on Saturdays to 10 p.m. on Sundays. The defendants had acquired and were in possession of two shops adjoining the plaintiff's premises, and the complaints were formulated in respect of noise and vibration caused by (1) an air compressor worked by electric motor in the basement of 176; (2) a hoist worked every quarter of an hour by electric motor; (3) a light railway running in a tube emerging in the cellar of one of the adjoining houses; and (4) traffic in wagons bringing materials, which were unloaded day and night. There was also a complaint about men talking in the adjoining house at times of refreshment. The whole of the complaints were limited to the night hours.

The evidence for the defendants appears to have been that the usual engineering methods were adopted which had also been used on other work similar at Oxford Circus and Piccadilly Circus without complaints being made; that it was impracticable to discontinue tunnelling work at night, and in the interests of safety special precautions had to be taken at each week-end cessation to timber up the work. The air compressor had been stopped since December 18 between the hours of 11 p.m. and 8 a.m., but the plaintiff alleged that this had made no difference. There was between 19 ft. and 29 ft. of soil between the street level and the tunnel, and no clay or soil was ever removed at night. Further, tests made in an adjoining house showed that there was no appreciable noise heard or vibration felt even when all the machines were running, but the plaintiff had refused to allow any representative of the defendant company to visit his house to make observations after 11 p.m.

The Court held that this was not a case in which it would be right to make an interlocutory order. The main ground upon which the motion was refused appears to have been that the defendants had used their statutory powers under the Metropolitan District Railway Companies Act, 1926, reasonably, as the Court intimated that here the evidence was all one way, showing that it was impracticable to break off the work each night. The week-end cessation was justified by the necessity of giving the workmen a rest, but it involved a loss of four hours, and it would be unreasonable to ask the defendants to waste four hours in each working day.

In our fourth and fifth articles on Extra-Contractual Liabilities of Employers and Contractors we explained the law on this subject, and on nuisances temporary in their character and we quoted a passage from the judgment of Mr. Vaughan Williams (subsequently Lord Justice) in the case Harrison v. Southwark and Vauxhall Water Co. (1891 2 Ch. 409) in which he instanced the case of a man who pulls down his house for the purpose of erecting a new one and causes considerable inconvenience to his next door neighbours, but pointed out he is not liable unless he fails to use all reasonable skill and care. This is a question of fact to be determined in each case, but as we also pointed out in those articles, persons applying for an injunction cannot be too careful as to their own conduct. The case we are considering illustrates this, for the learned judge, in speaking of the evidence, said that he was not satisfied that any real nuisance existed, and in this connection referred to the fact that the plaintiff had systematically prevented the defendants from testing the matter in his own house and that he did not admit that the noise from the compressor had ceased after it had in fact been proved to have been discontinued. In all cases of nuisance the Court carefully scrutinises the conduct of the parties from the first stage of the proceedings, as is well known in actions for nuisance in connection with ancient lights, which, however, are cases of permanent nuisance. Procrastination on the part of the plaintiff, undue haste on the part of the defendant so as to gain an advantage are all elements taken into consideration.

Cases of temporary nuisance necessarily cause a great deal of annoyance and inconvenience, as Lord Justice Williams pointed out in the above case, but as he said, they are not necessarily to be treated as actionable, for if that were so the business of life could not be carried on.

NEW CINEMAS

Blackburn.—We learn that a Liverpool syndicate has been granted a licence by the Licensing Justices for a new cinema to be erected in Audley-lane.

Birmingham.—The Denman Construction Co., Ltd., of 4-6, Denman-street, W.1, who are affiliated to the Gaumont-British Co., have made application for a cinematograph and variety theatre licence for premises to be erected at the corner of Steelhouse-lane, Weaman-street, and Slaney-street. The cinema, which will cost £250,000, is to seat 3,000, as stated in our issue for November 30. The architect to the company is Mr. George Coles, 40, Craven-street, W.C.2.

Coventry.—A further link in the chain of London and Provincial cinemas which the Gaumont-British Film Corporation is to erect is a new cinema in Jordan Well, Coventry. A variety theatre is also included in the scheme for which the Denman Construction Co., Ltd., 6, Denman-street, W.1, are contractors. The company's architect is Mr. George Coles, F.R.I.B.A., 40, Craven-street, W.C.2.

Manchester.—A contract for the conversion of premises into a cinema, to be called the "Palladium," for the Palais de Danse, Ltd., Rochdale-road, Harpurhey, has been awarded to the Mossley Construction Co., Ltd., of Manchester. The architects are Messrs. P. L. Browne & Son, F.R.I.B.A., Pearl Buildings, Northumberland-street, Newcastle-on-Tyne.

Manchester.—Plans for a super-cinema and shops in Rochdale-road, Blackley, have been approved by the Corporation. The plans have been prepared by Messrs. Gray and Evans, architects and surveyors, 51, North John-street, Liverpool.

Norwood.—Mr. A. E. Abrahams, of the "Regal," Marble Arch, is carrying out a scheme for erecting a new "Regal" Cinema at West Norwood Broadway. Holding 2,000 persons, the house has been designed by Mr. F. Edwards Jones, F.R.I.B.A., 8, Gloucester-mansions, Cambridge-circus, W.C.2. The Pitcher Construction Co. are contractors.

Pitsea, Essex.—We learn that it is proposed to erect a super-cinema on a plot of land at Pitsea. The scheme, which will seat 1,500, will also include a ballroom, billiards saloon, and shops.

Public Works Extensions, Middlesbrough.

From a report drawn up by Mr. S. E. Burgess, M.Inst.C.E., L.R.I.B.A., Borough Engineer, Architect and Surveyor to the Middlesbrough City Council, we learn that a full year's building was carried out in 1928. Works determined for 1929 include the reconstruction of Acklam Hall to form a secondary school, at a proposed cost of £8,000; a £5,607 extension to the new cemetery at Linthorpe, and a further 300 houses on the Whinney Banks housing estate.

NEW BUILDINGS IN LONDON

The Editor would be glad to receive information for publication under this heading from architects, builders, or other persons concerned.

Battersea.—MEMORIAL.—In connection with an appeal for £6,000 for a war memorial it is proposed that the memorial shall take the form of a Hall of Remembrance at Bolingbroke Hospital, Wandsworth Common. The hall will be used as a waiting-room.

Becontree. — PREMISES. — The London County Council has sanctioned a site in Heathway for the erection of a house and surgery for Dr. A. D. Gould.

Camden Town.—REBUILDING.—The Council of the Royal Veterinary College are considering the rebuilding of their Camden Town premises, which are in a dangerous condition. The cost will be considerably over £50,000, and the question of removing to another site is also being discussed. No plans have been decided upon yet.

Chelsea.—FLATS.—A contract is about to be placed for the superstructure of the large block of tenement flats to be erected for the Guinness Trustees. The plans have been prepared by Messrs. Joseph, 2, Paul's Bakehouse-court, Godliman-street, E.C.4. The quantity surveyor is Mr. A. J. H. Sprague, 104, High Holborn, W.C.1.

City.—HALL.—The Weavers' Company, whose hall was destroyed by fire in 1842, have under consideration the question of the erection of a new city hall. No definite decision has been made yet, but an early start on the project is anticipated.

Croydon.—ALTERATIONS.—Alterations and additions are to be made to premises in George-street for the Halifax Building Society. The builders are Messrs. Mullen & Lumsden, Ltd., 41, Eagle-street, W.C.1. The architects are Messrs. Ernest Gale, Heath & Sneath, 15, New Bridge-street, E.C.4.

Earl's Court.—OFFICES.—The London Electric Railways are erecting a new block of offices at their Earl's Court Station. The builders are Messrs. John Laing and Sons, Ltd., Mill-hill, N.W.7. The plans have been prepared by Mr. Stanley A. Heaps, architect to the companies, 55, Broadway, Westminster, S.W.1.

East Greenwich.—FACTORY.—A site in Norman-road has been selected by the National Enamels, Ltd., West Greenwich, for a factory.

East Ham.—HALL.—A contract has been secured by Mr. W. J. Cearns, Carpenters-road, Stratford, E.15, for the erection of a new church hall. Work will shortly commence on the site, which is at the corner of High-street South and Norman-road.

Edgware.—ADDITIONS.—The De Havilland Aircraft Co. are making additions to their works at Stag-lane Aerodrome. The building work is carried out by the company's workmen and the steelwork is being supplied by Messrs. Archibald D. Dawnay and Sons, Ltd., Steelworks-road, Battersea, S.W. The architect is Mr. A. G. Stedman, 317, High Holborn, W.C.1.

Eltham.—SCHOOL.—The L.C.C. propose a new school at Belmont Estate, near Green-lane, Eltham. The Council's architect is Mr. G. Topham Forrest, F.R.I.B.A., County Hall, S.W.1.

Friern Barnet.—HALL.—A new church hall, etc., is to be built on a site in Friern-lane to cost about £5,000. The building has been designed by Mr. R. E. Clarke, architect, 38, Elms-avenue, N.10.

Fulham.—RECONSTRUCTION.—M.A.B. is to reconstruct the kitchens of the Belmont Institution—leased to the Fulham Guardians—at £10,360. The engineer-in-chief of the M.A.B. is preparing plans.

Hampstead.—GARAGE.—A large addition is to be made to the garage at Cathcart-street, N.W.5, owned by Messrs. Birch Bros., to provide total accommodation for over 200 cars. The architects are Messrs. W. E. Riley and Glanfield, FF.R.I.B.A., 6, Raymond-buildings, Gray's Inn, W.C. The quantity surveyor is Mr. Horace W. Langdon, 292, High Holborn, W.C.

Hendon.—CHURCH.—The London Congregational Union has purchased a site in Eversfield-gardens, Watling estate, Hendon, for the erection of a church.

Hendon.—HOUSES.—Fifty-two houses are to be erected in a new road on the Pinner Wood estate for Mr. H. J. Sawyer. The plans have been passed by the Hendon Rural District Council.

Ilford.—FACTORY.—Work will commence at once upon the erection of a new factory for the manufacture of mantles, etc., in Ley-street, including garage, offices, etc. The builder will be Mr. W. J. Cearns, Carpenters-road, Stratford, E.15.

Kensington.—BANK.—A new block of banking premises is to be erected on a site in Gloucester-road, S.W., for the directors of the Westminster Bank, Ltd. The plans for the new building have been prepared by Messrs. Campbell Jones, Son and Smithers, 9, Dowgate-hill, Cannon-street, E.C.4. The quantities have been prepared by Messrs. Widnell and Trollope, surveyors, Broadway-court, Broadway, S.W.1.

Kennington.—BUILDING. — Mr. E. W. Wallis, of 365, Norwood-road, S.E.27, has had plans provisionally passed by the L.C.C. for the erection of a motor-coach station at a site on Palfrey-place and Carroun-road, Kennington.

Lewisham.—PUBLIC-HOUSE.—A contract is to be placed shortly for the erection of the large public-house, etc., to be provided on the London County Council housing estate by Messrs. Barclay, Perkins and Co., Ltd., brewers, of Park-street, Southwark, S.E. The plans have been prepared by Mr. F. G. Newnham, architect to the brewery company, and will involve an expenditure of approximately £50,000. The quantity surveyors are Messrs. Robinson and Roods, 37, Bedford-row, W.C.1.

Mitcham.—HOMES.—Mr. Isaac Wilson, of Mitcham, has set aside £200,000 for the provision of thirty-six cottage homes for the aged poor of Mitcham. Plans have been submitted to the urban council. The homes will be built on a corner site facing part of Mitcham Common.

Regent's Park.—ALTERATIONS. — Including new entrance gates, etc., are to be carried out at Sussex Lodge, N.W.1, for Lord Wavertree. The plans have been prepared by Mr. W. E. Binnie, 4, Pickering-place, S.W.1

Regent's Park.—GARAGE.—Tenders have been invited for the superstructure of the proposed Regent Royal Garage in Park-street, N.W.1, which is to be built by the Portman Trust, Ltd., 12, Regent-street, S.W.1. The plans have been prepared by Messrs. Mewes and Davis, 22, Conduit-street, W.1. The quantity surveyors are Messrs. Selby and Sanders, Caxton House, Westminster, S.W.1. Accommodation will be provided for about 1,000 cars.

Richmond.—RENOVATIONS. — Mr. E. J. Partridge, F.R.I.B.A., of Bank Chambers, Richmond, to whose designs the Infirmary, dining-hall and laundry blocks were erected some years ago, has now been instructed by the Board of Guardians to prepare specifications for the general renovation of the exterior of these buildings.

Rotherhithe. — HOUSES. — Bermondsey M.B.C. has purchased for £3,000 the disused Rotherhithe fire station in Gomm-road, for adaptation as housing accommodation.

St. John's Wood.—GARAGE.—A large garage, 350 ft. long, with workshops, and a petrol service station, are to be built on a site in Boundary-road and Abbey-road, N.W., for the London and Parisian Motor Co., Ltd., 87, Davies-street, W.1. The builders are Messrs. Cronk and Son, Boundary-road, N.W. The steelwork will be supplied by Messrs. A. and J. Main and Co., Ltd., Australia House, Strand, W.C.2. The plans have been prepared by Mr. Frank J. Potter, F.R.I.B.A., 24, John-street, Bloomsbury, W.C.

Seven Dials.—THEATRE.—Two preliminary contracts have been placed for the new theatre to be built in Castle-street, Great Earl-street and Little White Lion-street, W.C., for Mr. Bertie Meyer. These are for the excavation and construction of foundations and retaining walls, given to Messrs. Willment Bros., Waterloo, S.E., and Messrs. Gee, Walker & Slater, Ltd., 58, Pall Mall, S.W., respectively. The architects are Messrs. Wimperis, Simpson & Guthrie, FF.R.I.B.A., 61, South Molton-street, W.1.

South Lambeth-road.—FLATS AND SHOPS.—A new block of property comprising shops, flats, etc., is to be erected on a site in South Lambeth-road, S.W. The plans have been prepared by Messrs. Yates, Cook and Darbyshire, 43, Great Marlborough-street, W.1, and the quantities by Messrs. W. E. Writer and Partners, 43, Great Marlborough-street, W.1.

Southwark.—CLUB.—The trustees of the Charterhouse Mission, whose present headquarters in Tabard-street are inadequate, have acquired a site near by for new premises. The plans have been prepared by Mr. G. N. Kent, architect, 521, Barking-road, E.13, and a meeting will be held shortly to decide on the question of contracts.

Strand.—ADDITIONS.—Extensive additions are to be made to the Strand Corner House restaurant, in the Strand and Craven-street, W.C.2. The building work is to be carried out by the Building Department of Messrs. J. Lyons and Co., Ltd., Cadby Hall, Kensington, S.W. The steelwork will be supplied and erected by Messrs. Dorman, Long and Co., Ltd., Central-buildings, Westminster, S.W., and the floors by Messrs. Diespeker and Co., Ltd., 57, Holborn Viaduct, W.C.1. The plans have been prepared by Mr. F. J. Wills, F.R.I.B.A., 62, Oxford-street, W.1.

Tolworth.—PUBLIC-HOUSE.—A site at the junction of the Kingston By-pass-road and Ewell-road has been acquired by Messrs. Charrington and Co., Ltd., Anchor Brewery, Mile End, E.1. for the erection of a new public-house. The plans are being prepared by Mr. W. S. Trent, 6, Broad-street-place, E.C.2.

Woolwich.—SCHOOL.—The London County Council Education Committee are to invite tenders shortly for the erection of a large open-air school at Charlton Park, S.W. The plans have been prepared by Mr. E. Topham Forrest, F.R.I.B.A., County Hall, S.E.1, architect to the committee, and the quantities are being completed by Messrs. Franklin and Andrews, surveyors, 25, Ludgate-hill, E.C.4.

Woolwich.—SHOPS.—The Corporation has granted a lease for 99 years to Messrs. Montagu Holmes and Sons, 33, Paternoster-row, E.C.4, to take a building agreement of the vacant land in Westborne-avenue, upon which to build five shops of 22-ft. frontage each.

Building Extensions at Oxford.

The scheme for the provision of a new Repertory Theatre is now well advanced, and the demolition of the old Playhouse in Woodstock-street has been commenced. The new theatre will be capable of seating 600 persons, and the plans are being now completed by Mr. Ernest Schaufelberg, of 3, Elm Court, Temple, E.C. The building will be largely constructed of reinforced concrete and steel with an elevation of tooled concrete, similar to the Fortune Theatre in London. It is hoped to have the building completed by Michaelmas term.

Funds are being collected, and now amount to £15,000, towards the erection of new undergraduates' chambers, rector's house, etc., at Lincoln College. The chambers will be built on three sides of a quadrangle. The architect is Mr. Herbert Read, F.R.I.B.A. (Messrs. Read & Macdonald), 16, Cork-street, Bond-street, W.1. Quantities for the rector's house are being prepared by Messrs. Stoner and Sons, 63, New Broad-street, E.C.2.

RATES OF WAGES IN THE BUILDING TRADE

[Every endeavour is made to ensure accuracy but we cannot be responsible for errors.].

	Masons.	Bricklayers.	Carpenters Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers.
Aberdare	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Accrington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Aldershot	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Alfreton	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Alnwick	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Altrincham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Ashford Kent	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Ashington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Ashton-under-Lyne	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Aylesbury	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Aylsham	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Banbury	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Barnsley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Barnstaple	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Barrow-in-Furness	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Barry	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Basingstoke	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Bath	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bedford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Berwick	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bexhill	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Birkenhead	1/10	1/10	1/10	1/11	1/10	1/10	1/9½	1/4½
Birmingham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bishop Auckland	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Blackburn	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Blackpool	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bolton	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bournemouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bradford	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bradford-on-Avon	1/4	1/4	1/4	1/4	1/4	1/3	1/3	1/0
Braintree	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Brentwood	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bridgwater	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Bridlington	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Brighton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bristol	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bromsgrove	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bromyard	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Bungay	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Burnley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Burton-on-Trent	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bury	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Buxton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Cambridge	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Canterbury	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Cardiff	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Carlisle	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Chatham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Chelmsford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Cheltenham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Chester	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Chesterfield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Chorley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Cirencester	1/4½	1/4½	1/4½	1/4½	1/4½	1/3½	1/3½	1/0½
Clacton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Colchester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Coventry	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Cranbrook	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Crewe	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Cromer	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Darlington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Deal	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Denbigh	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Derby	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Devizes	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/0
Dewsbury	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Doncaster	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Dorchester	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/0
Dorking	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Dovercourt	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Driffield	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Droitwich	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Durham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Eastbourne	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
E. Glam. (Mon. Val.)	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Ely	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Exeter	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/5½	1/2
Exmouth	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Fakenham	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Felixstowe	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Folkestone	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Frome	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/0
Glossop	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Gloucester	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Godalming	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Goole	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Gosport	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Grantham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/0½
Great Yarmouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/2½
Grimsby	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Guildford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Halifax	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Harpenden	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Harrogate	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Hartlepools	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Harwich	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Hastings	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Hatfield	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Hednesford	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/1½
Hereford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	1/0
Herne Bay	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0½
Hertford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Hitchin	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Hoddesdon	1/5	1/5	1/5	1/5	1/5	1/5	1/5	11½
Holt	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Huddersfield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Hull	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Hunstanton	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Huntingdon	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Isle of Wight	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0½
Ipswich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Keighley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Kettering	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Kidderminster	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
King's Lynn	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Lancaster	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Leamington Spa	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Leeds	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Leicester	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Leighton-Buzzard	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Lichfield	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Lincoln	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Littlehampton	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Liverpool	1/10	1/10	1/10	1/11	1/10	1/10	1/9½	1/4½
Llandudno	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Llanelly	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
London:								
12 m. radius	1/9	1/9	1/9	1/9*	1/9	1/9	1/8	1/4
12-15 m. radius	1/8½	1/8½	1/8½	1/8½*	1/8½	1/8½	1/7½	1/3½
Loughborough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Lowestoft	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Luton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Macclesfield	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Maidstone	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Malvern	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Manchester	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Mansfield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Margate	2/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Market Harb'rough	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Matlock	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Melton Constable	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Melton Mowbray	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Merthyr Tydfil	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Middlesbrough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Newark	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Newbury	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Newcastle-on-Tyne	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Newcastle-ur-Lyne	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
New Forest	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Newmarket	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Newport, Mon.	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Northampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Norwich	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Nottingham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Nuneaton	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Oakham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Oldham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Oxford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Paignton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Peterborough	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Plymouth	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/6½	1/2½
Pontypridd	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Portsmouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Preston	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Ramsgate	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Reading	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Redcar	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Redditch	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Reigate	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Retford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Ripon	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Rochdale	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Rochester	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Rugby	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Saffron Walden	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
St. Albans	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
St. Helens	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Sawbridgeworth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Saxmundham	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Scarborough	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Sevenoaks	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Sheffield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Shrewsbury	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Sittingbourne	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Southampton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Southend-on-Sea	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Southport	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
South Shields	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stevenage	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Stockport	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stockton-on-Tees	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stoke-on-Trent	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stourbridge	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Stourport	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Stowmarket	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Stratford-on-Avon	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Stroud	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Sunderland	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Swaffham	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Swansea	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Swindon	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/2
Tamworth	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Taunton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Thetford	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Torquay	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Totnes	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Trowbridge	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Tunbridge Wells	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Uttoxeter	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Wakefield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Walsall	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Wallsend	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Warminster	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Warrington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Warwick	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Wells (Norfolk)	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Welwyn Gar. City	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
West Bromwich	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Weston-sup.-Mare	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Weymouth	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Whitby	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Wigan	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Winchester	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Windsor	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Wisbech	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Wolverhampton	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Woodbridge	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Worcester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Worksop	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Worthing	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Wrexham	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Wroxham	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Wymondham	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
York	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½

* The rate recognised by the National Association of Plasterers, Granolithic and Cement Workers, is 1/11½ per hour.

For Building Trade wages in Scotland, see page 318.

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed, that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given is the latest date when the tender, or the names of those willing to submit tenders, may be sent in, the name and address at the end is the person from whom or place where quantities, forms of tender, etc., may be obtained.

Following is a list of abbreviations:—Borough Surveyor, B.S.; Borough Engineer, B.E.; District Surveyor D.S.; Clerk, C.; Town Clerk, T.C.; County Engineer, C.E.; County Surveyor, C.S.; County Architect, C.A.; Surveyor, S.; Engineer, E.; Borough Architect, B.A.: Architect, A.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc.

FEBRUARY 11.

Burnley.—Bandstand.—In Townley Park, for T.C. B.E. and S.

Burton-upon-Trent.—Jobbing Work.—At the public elementary schools, for E.C. L. E. Burgess, Director of Education, Education Offices, Guild Street, Burton-on-Trent.

Ely.—Houses.—26, on new Barnes housing site, for U.D.C. G. A. J. Edmundson, architect and surveyor, Silver-st. Dep. £1 1s.

Glasgow.—Building.—Observation ward at Belvedere Hospital, for T.C. D. Stenhouse, T.C.

Leighton Buzzard.—Sewerage Disposal Works.—Alterations and additions, execution of various constructional works in connection with above scheme, for the Leighton Buzzard U.D.C. B. H. Robjant, S., Council Offices. Dep. £2 2s.

Liverpool.—Two Open-air Classrooms.—At Springwood Council school, Allerton, for Corporation. Land Steward and Surveyor (Architectural Department), Municipal Buildings. Dep. £2 2s.

Liverpool.—Conversion.—Of "Underlea," Aigburth, into an open-air day special school, for Corporation. Land Steward and Surveyor (Architectural Department), Municipal Buildings. Dep. £2 2s.

Markinch.—Houses.—20, for T.C. A. D. Haxton, architect, 3, High-st., Leven.

Port St. Mary (I. of M.).—Dwellings.—6 workmen's dwellings, for Port St. Mary Village Commissioners. G. Kay & Sons, architects, 22, Athol-st., Douglas.

Rothwell.—Houses.—34 scullery houses, for U.D.C. J. Southwart, S. Dep. £1 1s.

St. Helens (I. of W.).—Conveniences.—At Puckpool Battery, for U.D.C. L. F. Phillips, clerk, Alexandra-rd., High Park, Ryde, I.W.

Sharnford.—Alterations.—To Church of England school. Architect, County Education Office, Grey Friars, Leicester. Dep. £2 2s.

Thornaby-on-Tees.—Housing Scheme.—Contract No. 46, 50 houses; 47, sewers, comprising 385 ft. 9 in. diameter and 1,814 ft. 6 in. diameter, etc.; 48, Roads, comprising kerbing, channelling, carriageways in tarmacadam, etc., for T.C. W. E. Orchard, F.S.I., M.Inst.M. & Cy.E., B.E., S. and Housing A., Town Hall. Dep. £2 2s each.

Thorne.—Houses.—12, at Hatfield, and 36 at Thorne, for R.D.C. H. Plewes, S. Dep. £2 2s.

Whittlesey.—Houses.—Two blocks of 4 houses at Stonald-rd., Whittlesey, and one block of 4 houses at Coates. H. W. Hawkins, Surveyor, Old Fletton. Dep. £1 1s.

FEBRUARY 12.

Bentley.—School.—Removal of temporary school building from Bentley-rd., Bentley, to Goole-rd., Thorne, and re-erecting same, together with additional conveniences and fences, for West Riding E.C. Education Department, County Hall, Wakefield.

Essex.—Secondary School.—Erection of Palmer's endowed proposed new Secondary School for Girls, Grays, for the Essex Education Committee. Jno. Stuart, F.R.I.B.A., County Architect, Springfield Old Court, Chelmsford. Dep. £2 2s., to F. H. Owers, County Accountant, Duke-st., Chelmsford.

Greasbrough.—Conversion.—Of privies to water closets in Scrooby-st., Potter-hill, and adjoining streets, for U.D.C. J. H. Jackson, clerk. Dep. £2.

Guildford.—Telephone Exchange.—Erection of, at Shere, Guildford, for the Commissioners, H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

Hatfield.—School.—Removal of temporary school buildings from Thurcroft to Doncaster-rd., Hatfield, re-erecting same, together with conveniences, fences, etc., for West Riding E.C. Education Department, County Hall, Wakefield.

Middlesbrough.—Alterations.—At Holgate Institution, for B.C. R. Lofthouse & Sons, A., 129, Albert-rd., Middlesbrough.

Middleton.—Pavilion.—Gymnasium and sports pavilion in connection with Middleton Queen Elizabeth's Grammar school, for Lancashire E.C. Stephen Wilkinson, F.R.I.B.A., County Architect, 16, Ribblesdale-place, Preston. Dep. £2.

Nottingham.—School.—Secondary school for girls, Gregory-boulevard, for T.C. T. Wallis Gordon, City E. and S. Dep. £2.

***Orsett.**—Houses.—Erection of 94, in various parishes, for the Orsett R.D.C. G. F. Andrassy, Engineer and Surveyor, Council Offices, Palmers-avenue, Grays.

Rivington.—Extensions.—Alterations and extensions of Rivington and Blackrod Grammar school, for Lancashire E.C. Stephen Wilkinson, F.R.I.B.A., County Architect, 16, Ribblesdale-place, Preston. Dep. £2.

Stocksbridge.—House.—Caretaker's house at Stocksbridge New school, for West Riding E.C. Education Department, County Hall, Wakefield.

FEBRUARY 13.

Darlington.—School.—Adjoining existing North-rd. Council school, for C.B. E. Minors, B.S. Dep. £1 1s.

Dublin.—Plastering.—At the Arcade, General Post Office, Dublin. T. Cassedy, Secretary, Office of Public Works, Dublin. Dep. £1.

Dublin.—Plastering, etc.—At Custom House, for Commissioners of Public Works. T. Cassedy, secretary, Office of Public Works. Dep. £1.

Leicester.—Telephone Exchanges.—(1) Evington, (2) Belgrave, and (3) Stoneygate Telephone Exchanges, for the Commissioners, H.M.O.W. Contracts Branch, King Charles-st., Westminster, S.W.1. Dep. £1 1s. in each case.

Pudsey.—Houses.—(a) 108 scullery type houses, in blocks of 6; (b) 16 scullery type houses, in pairs, for Corporation. Basil H. Noble, M.I.M. and Cy.E., B.S., Town Hall. Dep. £5.

Skegness.—Alteration.—To ladies' and gentlemen's conveniences at Tower Gardens Pavilion, for U.D.C. Surveyor.

Witham.—Public Convenience.—In Malden-rd., for U.D.C. Council's Surveyor.

FEBRUARY 14.

Belfast.—Masonry.—Delivery and working of a portion of the masonry required for the erection of the new Law Courts, etc., Belfast, for the Commissioners, H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

Eton.—Additions.—Also alterations to sanitary accommodation at Workhouse, at Slough, for B.G. H. J. Stribling, A.R.I.B.A., 65 and 67, High-st., Slough. Dep. £1.

Leitrim.—Extension.—Of Kiltyglogher R.C. church, Co. Leitrim. Jas. Donnelly, architect, Enniskillen. Dep. £2 2s.

Liverpool.—Shelters.—Tramway passenger shelters at Walton-vale and Scotland-rd., for T.C. General Manager, Liverpool Corporation Tramways, 24, Hatton-garden, Liverpool.

Newton-in-Makerfield.—School.—Secondary school, for Lancashire E.C. Stephen Wilkinson, F.R.I.B.A., County Architect, 16, Ribblesdale-place, Preston. Dep. £2.

Witham.—Housing Repairs.—To their 132 houses during the year ending March 31, 1930, for the U.D.C. F. H. Bright, Clerk.

FEBRUARY 15.

Bexhill-on-Sea.—Heating.—Low-pressure hot water heating at Post Office, for H.M.O.W. Contracts Branch, H.M. Office of Works, King Charles-st., S.W.1. Dep. £1 1s.

Hounslow.—Houses.—Erection of 126 non-parlour type houses on the Sutton-lane estate, Hounslow, for the Heston and Isleworth U.D.C. J. G. Carey, A.M.Inst.C.E., Council House, Hounslow. Dep. £2 2s.

***Islington.**—Hospital Buildings.—Erection of additions to the Female Receiving Ward at the Infirmary, Highgate Hill, N.19, for the Guardians of the Poor of the Parish of St. Mary, Islington. Vine & Vine, A.R.I.B.A., Tudor Chambers, Station-rd., Wood Green, N.22. Dep. £2

Killarney.—Houses.—6 at Kilcoolaght, for U.D.C. John Gallivan, Engineer to the Council. Dep. £5.

FEBRUARY 16.

Ashford.—Distempering.—60 houses, internally, for U.D.C. Surveyor, 5, North-st., Ashford, Kent.

Buxton.—Taking Down.—Fives Court, and re-erecting at Buxton College, for the Derbyshire Education Committee. George H. Widdows, F.R.I.B.A., County Offices, St. Mary's-gate, Derby. Dep. £1 1s.

Clyst St. Mary, Devon.—Additions.—Alterations and repairs, etc., at the Clyst St. Mary Council school, for the Devon County E.C. County Architect's Office, 97, Heavitree-rd., Exeter.

Cwm, Mon.—Decorating.—Of the interior of Constitutional Club, Cwm., Mon. Secretary (Mr. W. Cool).

Devonport.—Erection.—Of 38 houses, and for the formation of road and laying of sewers. E. H. A. Barron, F.F.A.S., 11, The Crescent, Plymouth.

Folkestone.—Houses.—20 non-parlour, on Canterbury-rd.-Dover-rd. housing site, for T.C. A. E. Nichols, B.E. Dep. £2 2s.

Hastings.—Houses.—Pair of semi-detached non-parlour type, on Broomgrove housing site, Upper Broomgrove-rd., Ore, for Corporation. B.E. Dep. £1 1s.

Newcastle-on-Tyne.—Extensions.—At Royal Victoria Infirmary to nurses' home. Newcombe & Newcombe, 23, Eldon-square, Newcastle-upon-Tyne. Dep. £2 2s.

Rawtenstall.—Houses.—40 at Newchurch-rd. site. A. Brocklehurst, F.R.I.B.A., St. James' Chambers, Waterfoot, Rossendale, Lancs. Dep. £2 2s.

Salford.—Alterations.—Extensions to office buildings at Electricity Works, Frederick-rd., Pendleton, for T.C. City Electrical Engineer, Electricity Offices, Frederick-rd. Dep. £1 1s.

Stretford.—Two Sub-Station Buildings.—For U.D.C. J. A. Robertson, M.I.E.E., M.I.Mech.E., 20, Brazennose-st., Manchester. Dep. £2 2s. each.

Tyrone.—Heating.—Repairs or replacement of present heating installation at County Hospital. Registrar at Hospital.

Wakefield.—School.—Snapethorpe Council School: erection of a three-department school, to provide accommodation for 1,160 scholars, and a special subjects' centre for 100 pupils. Percy Morris, Architect, Town Hall, Wakefield. Dep. £1 1s.

***Wood Green.**—New Elementary School.—Erection of, in Albert-rd., to accommodate 434 scholars, for the Wood Green U.D.C. C. H. Croxford, architect, Town Hall, Wood Green, N.22. Dep. £2 2s. (Payable to the Treasurer).

FEBRUARY 18.

Guildford.—Houses.—104 on Aldershot-rd. housing estate, for T.C. J. W. Hipwood, Assoc.M.Inst.C.E., B.S. and E., Tuns-gate, Guildford.

Hull.—Houses.—(a) 108 parlour and non-parlour houses; (b) 118 parlour and non-parlour houses. All on the North Hull housing site extension, Inglemire-rd. and Hall-rd., and (a) 110 parlour and non-parlour houses, (b) 144 parlour and non-parlour houses. All on the Derringham Bank Farm site, Willerby New-rd., for the Corporation.

***Smethwick.**—Houses.—58 non-parlour type, on Smethwick Hall estate, Auckland-rd., for C.B. Roland Fletcher, Assoc.M.Inst.C.E., B.E. and S., Council House. Dep. £5 5s.

FEBRUARY 19.

***Bristol.**—Postmen's Delivery Office.—Erection of, in Prospect-place, Bristol (East), for the Commissioners H.M.O.W. Contracts Branch, King Charles-st., Westminster, S.W.1. Dep. £1 1s.

Colwyn Bay.—Housing Scheme.—17 non-parlour type and 6 parlour type houses on the above site, for U.D.C. W. J. Dunning, M.I.C.E., E. and S., Council Offices, Colwyn Bay. Dep. £3 3s.

West Riding.—Building.—For (1) proposed new cowhouse at Bridge Farm, Acaster Malbis, near York, and (2) proposed new cowhouse on holding No. 20, Castley and Leathley estate, Pool, for C.C. County Land Agent, County Hall, Wakefield.

FEBRUARY 20.

Clonmell.—Church Repairs.—Completion of the front and tower of SS. Peter and Paul's Church, Clonmel, for the Right Rev. Dean Walsh, D.D., P.P., V.F. Ashlin & Coleman, Architects, 7, Dawson-st., Dublin. Dep. £3 3s.

Dublin.—Plumbing Work, etc.—For Commissioners of Public Works. T. Cassedy, secretary, Office of Public Works, Dublin.

Hastings.—Additions.—Also alterations to 29 and 30, Havelock-rd., for the Hastings Permanent Building Society. Henry Ward, Son, & Wray, architects, 8, Bank-buildings. Dep. £2 2s.

***Hove.**—Materials and Hire.—Supply and hire of horses, carts, drivers required by the Council and supplying and executing street masonry and jobbing works during year, commencing April 1. W. Jermyn Harrison, T.C., Town Hall, Hove.

Melbourn.—Housing.—In the following parishes: Bassingbourn, 6 houses; Meldreth, 6 houses, for R.D.C. C. W. Smith, architect, 4, Regent-st., Cambridge.

Richmond, Surrey.—New Convenience.—Construction of, at Kew Bridge, together with certain demolition and reconstruction works, for the Richmond B.C. Borough Engineer and Surveyor, Town Hall, Richmond, Surrey. Dep. £1 1s.

FEBRUARY 22.

Hull.—Elementary School.—First portion in Hall-rd., for C.C. David Harvey, A.R.I.B.A., City Architect, Guildhall. Dep. £2 2s.

***London.**—Internal Painting.—At the Government Offices, Southern Buildings, Whitehall, S.W., for the Commissioners, H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

FEBRUARY 23.

***Kent.**—Central School.—Erection of, at Snodland, Kent, for the Kent E.C. E. Salter Davies, Dir. of Edu., Springfield, Maidstone, Kent. Dept. £2 2s. (Cheques payable to K.E.C. and crossed.)

Leeds.—Power Station.—Construction of buildings, roofwork, drainage, etc., at Kirkstall P.S. For C.C. C. Nelson Hefford, Manager, Electricity Department, 1, Whitehall-rd., Leeds. Dep. £3 3s.

St. Alban's.—Additions.—To fire station premises, Victoria-st., for Corporation. F. T. Negus, C.E. and S., 38, St. Peter's-st. Dep. £1 1s.

FEBRUARY 25.

Alnwick.—Houses.—10 houses in Green Bat, for U.D.C. G. K. Taylor, Town Surveyor.

Beddington and Wallington.—Houses.—4, on Bute-rd. estate, Wallington, for U.D.C. S. F. R. Carter, E. and S. Dep. £1 1s.

***Greenwich.**—Repairs and Redecorative Works.—To certain flats in the Council's Housing Estate at Blackheath, for the Greenwich B.C. Borough Engineer, Town Hall, Greenwich-rd.

***Newquay.**—Pavilion.—Erection of and works in connection therewith, for the Newquay U.D.C. The Surveyor, Beach-rd., Newquay. Dep. £5 5s.

***River Thames.**—General works and repairs (including jobbing works).—Execution of, exclusive of works of a mechanical nature, to sewers, engine houses, buildings, bridges, subways, tunnels, etc., in connection with the River Thames, for the L.C.C. Chief Engineer, Spring-gardens, S.W.1. Dep. £3.

FEBRUARY 26.

Wenlock.—Houses.—3 pairs of parlour-type on Southfield-rd. building estate, for T.C. G. Riley & Son, architects, Wellington.

FEBRUARY 27.

Portsmouth.—Secondary Schools.—Erection of (for boys and girls), North End, Portsmouth, for the City of Portsmouth Local Education Authority. Adrien J. Sharp, Authority's Architect, Edu. Dept., the Guildhall, Portsmouth. Dep. £5 5s.

***Stockport.**—Telephone Exchange.—Erection of, at Marple, Stockport, for the Commissioners, H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

***Watford.** — Alterations and Additions. — To Leavesden Mental Hospital, Abbot's Langley, for the M.A.B. Office of the Board, Victoria Embankment, E.C.4. Dep. £5.

FEBRUARY 29.

***Gateshead.**—Telephone Exchange.—Erection of, at Low Fell, Gateshead, for the Commissioners, H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

Newton Abbot.—Installation.—Of electric lighting at the Institution, Newton Abbot, for B.G. Watson & Watson, Architects, 36, Torwood-st., Torquay. Dep. £2 2s.

MARCH 4.

Long Eaton.—Houses.—For U.D.S. H. Raven, Housing Architect.

MARCH 27.

Cairo.—Electric Lighting.—In town of Fashn, for Ministry of Interior, Section des Municipalites et Commissions Locales, Cairo. Department of Overseas Trade, 35, Old Queen-st., S.W.1. (Reference number B.X. 5037.)

NO DATE.

Barnsley.—Painting, etc.—At Barnsley Central Working Men's Club and Institute. G. H. Adams, secretary.

Chesterton.—Houses.—4 pairs of houses at Great Shelford, and 2 pairs of houses at Dry Drayton, for R.D.C. William Elson, Clerk, 12, Saint John's-st., Cambridge. Dep. 10s.

Featherstone.—Installation.—Of electric light at North Featherstone-lane Council school, Featherstone. Charles Harris, Education Offices, Knottingley.

St. Helens.—Various.—(a) Electric lighting; (b) heating installation; (c) hot water supply; (d) roof tiling, at new boys' secondary school, for E.C. Secretary for Education.

Seacombe.—Extensions.—To the British Plaster Board Company's factory. J. Jameson Green, F.R.I.B.A., Heswall. Dep. £1 1s.

MATERIALS, etc.

FEBRUARY 11.

Chislehurst.—Highway Materials.—For U.D.C. J. J. Brown, clerk.

Coventry.—Highway Materials.—For T.C. E. H. Ford, City E. and S.

Dublin.—Cast-iron Pipes, etc.—For C.B. G. J. Sherlock, T.C.

Gainsborough.—Road Materials.—For U.D.C. W. Parker, E. and S.

Gosport.—Road Materials, etc.—For T.C. B.E.

London.—Builders' Materials.—For St. Marylebone B.C. R. C. Graves, T.C.

Ruislip-Northwood. — Road Materials. — For U.D.C. H. R. Metcalfe, E. and S.

Runcorn.—Road Materials.—For R.D.C. J. L. Beckett, E. and S.

Southport.—Road Materials.—For C.B. A. E. Jackson, B.E. and S.

Surbiton.—Highway Materials.—For U.D.C. H. T. Mather, S.

Westmorland.—Tar, etc.—For C.C. C. E. Hines, C.S., 12, Lowther-st., Kendal.

FEBRUARY 12.

Cardiff.—Cement, etc.—For T.C. City E.

Driffield.—Road Materials.—For R.D.C. C. H. Hines, S.

Leeds.—Road Materials, etc.—For T.C. E. W. Cockerlyne, Highways E., 155, Kirkstall-rd.

Oakworth.—Road Materials.—For U.D.C. G. Blackbrough, E. and S.

Packham.—Road Materials.—For U.D.C. J. Wrest, E. and S.

Padiham.—Road Stores.—J. Wrest, E. and S., Council Offices.

Poole.—Highway Materials, etc.—For T.C. E. J. Goodacre, B.E.

Tendring.—Materials. W. Terkelsen, Asst. H'way S., Great Bentley, Essex.

York.—Road Materials.—F. W. Spurr, C.E., Guildhall.

FEBRUARY 13.

Cornwall.—Road Materials.—For C.C. C.S.

Friern Barnet.—Granite Chippings, etc.—For U.D.C. J. M. Gameson, E. and S.

Horncastle.—Road Materials.—For R.D.C. J. S. Derbyshire, S.

Isle of Ely.—Granite, etc.—For C.C. R. S. W. Perkins, C.S.

London.—Road Materials.—For Hackney B.C. C. Holt, B.E. and S.

London.—Paving Materials, etc.—For Deptford B.C. A. Purkis, T.C.

London.—Road Materials.—For Islington B.C. C. G. E. Fletcher, T.C.

London.—Road Materials.—For Shoreditch B.C. B.S.

Middlesex.—Road Materials.—For C.C. A. Dryland, C.E.

Richmond (Surrey).—Highway Materials, etc.—For T.C. J. W. Trodd, B.E. and S.

Tadcaster.—Road Materials.—For R.D.C. Geo. A. Bromet, clerk.

Teddington.—Road Materials.—For U.D.C. E. Bostock, S.

FEBRUARY 14.

Lambeth.—Materials and Services.—Tenders for alternative periods of six and twelve months, from March 31, 1929, and for alternative periods of one, two or three years from March 31, 1929, for disposal of street sweepings for the Lambeth B.C. Osmond Caitlin, M.Inst.C.E., Borough Engineer, Town Hall, Brixton Hill, S.W.2.

Leyton.—Road Materials, etc.—B.E. and S., Town Hall, E.10.

Midhurst. — Materials. — And haulage, for R.D.C. G. C. Cole, M.Inst.M. & Cy.E., S., Council Offices.

FEBRUARY 15.

Daventry.—Granite, Slag and Tarmacadam.—W. Charles Robson, H.S., 4, New-st.

Doncaster.—Highway Materials.—For R.D.C. W. R. Crabtree, S.

Irlam.—Materials.—E. and S., Council Offices.

Leeds.—Builders' Materials.—For Electricity Department. C. Nelson Hefford, Manager, Electricity Department, 1, Whitehall-rd.

FEBRUARY 16.

Bedfordshire.—Road Materials.—For C.C. C.S.

Dunmow.—Materials, etc.—P. E. Furlong, 58, New-st.

Eccles.—Road Materials.—For T.C. B.S.

Felixstowe.—Cement, etc.—For U.D.C. H. Clegg, S.

Flaxton.—Broken Slag and Tar.—S., Huntington, York.

Frimley.—Road Materials.—For U.D.C. R. H. Porteous, E. and S.

Long Sutton.—Highway Materials.—For U.D.C. S.

Rye.—Stone, Tar, etc.—For R.D.C. R. E. Fuller, Broad Oak, Rye, Sussex.

Staines.—Road Materials.—For R.D.C. D. C. Fidler, E. and S.

FEBRUARY 18.

Axminster.—Tar Surface Dressing.—For 170,000 super. yds. J. W. Pike, S., Council Offices.

Belfast.—Builders' Materials, etc.—For C.B. Frank H. Whysall, City Electrical Engineer and General Manager.

Birkenhead.—Granite, etc.—For Corporation. R. W. Johnson, B.E. and S.

Cardiff.—Engineers' and Builders' Stores.—Neil J. Peters, M.Inst.C.E., W.E., City Hall.

Diss.—Granite, etc.—For U.D.C. A. Cooper.

Easington.—Slag, etc.—For R.D.C. R. U. Harper, S.

Hornsea.—Tarmacadam.—For U.D.C. H. W. Boardman, E. and S.

Hull.—General Stores.—General Manager, Tramway Office, Albion-st.

London. — Builders' Materials. — For Bethnal Green B.C. A. E. Darby, B.E. and S.

London.—Builders' Materials, etc.—For Finsbury B.C. B.S.

Ossett.—Highway Materials.—For T.C. B.S.

Rawtenstall.—Materials, etc.—For Corporation. B.S., Town Hall.

NO DATE.

Horsham.—Tar, Chippings, etc.—C. G. Atkinson, M.Inst.M. & Cy.E., Council Offices.

ENGINEERING, IRON AND STEEL

FEBRUARY 11.

Pentardawe.—Sewerage.—Construction of about 466 yds. of 12 in., 1,074 yds. of 9 in., 40 yds. of 6 in. cast-iron pipe sewers; 949 yds. of 12 in., 9,554 yds. of 9 in., and 2,580 yds. of 6 in. stoneware pipe sewers, together with construction of brick manholes, flushing chambers, and ventilating shafts, etc., at Gwaun-Cae-Gurwen, for R.D.C. B. Islwyn Phillips, engineer. Dep. £5.

FEBRUARY 12.

Bolsover.—Tower.—New water tower in Langwith-rd., for U.D.C. T. B. Kenyon, clerk. Dep. £10 10s.

Eton.—Sewage Disposal.—New sewage disposal works, consisting of screen and screening chamber, pump and motor house, sedimentation tanks, bacteria beds, storm-water standby tank, sludge lagoons, etc., on land situate in Iver, for R.D.C. A. Gladwell, E. Dep. £3 3s.

FEBRUARY 14.

Belper.—Drainage.—Sewerage and sewage disposal works for Markeaton and Allestree, for R.D.C. Sands & Walker, engineers, Milton-chambers, Nottingham. Dep. £3 3s.

Blackpool.—Steelwork.—170 tons steel reinforcement, for Harrowside-lane garage, for C.B. F. Wood, B.E. and S.

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Caterham.—Drainage.—Construction, in low level area of district, of about 20,000 yds. of stoneware and cast-iron sewers of 7 in., 9 in. and 12 in. in diameter, together with all manholes, ventilating shafts, and other appurtenant works, for U.D.C. John Taylor & Sons, engineers, Caxton House, Westminster, S.W.1. Dep. £5.

FEBRUARY 15.

Cairo.—Tower.—Cooling tower, elevated tank, supporting structure, piping connections and centrifugal pump, for Egyptian Ministry of Public Works. Department of Overseas Trade, 35, Old Queen-st., S.W.1. (Ref. A.X. 7373.)

Horton.—Sewerage.—In Totley, for R.D.C. Surveyor, 1, Camping-lane, Woodseats, Sheffield.

FEBRUARY 18.

Tendring.—Sewerage.—Laying of about 5,000 yds. of 9 in. and 12 in. sewers, with manholes and ventilators, together with tanks, percolating filters, etc., at Kirby-le-Soken, for R.D.C. F. G. Vincent-Brown, E. and S., Dovercourt.

Tynemouth.—Construction.—In cement concrete, an apron-wall of about 250 yds. in length upon the foreshore to defend the cliffs against the sea, are invited, for the C.B. John F. Smillie, B.S., Howard-st., North Shields. Dep. £5 5s.

West Riding.—Widening and Improvement. Of Almsford Bank (Contract No. 2), for C.C. West Riding Surveyor, County Hall, Wakefield. Dep. £1.

FEBRUARY 21.

Bootle.—Cricket Stand.—In reinforced concrete, for C.B. B.E.'s Office, Town Hall, Bootle.

FEBRUARY 25.

Littlehampton.—Reservoir.—Reinforced concrete reservoir, together with sundry pipe connections, meters, and other ancillary works, for U.D.C. Howard Humphreys & Sons, consulting engineers, 28, Victoria-st., Westminster. Dep. £3 3s.

FEBRUARY 26.

Hemel Hempsted.—Bridge.—Demolition of old bridge and construction of new bridge over Grand Junction Canal, in Fishery-rd., for T.C. A. Murray-Smith, B.E. Dep. £5 5s.

FEBRUARY 28.

Antwerp.—Bridges.—2 swing bridges, for T.C. Department of Overseas Trade, 35, Old Queen-st., S.W.1. (Ref. A.X. 7382.)

Johannesburg.—Steelwork.—Structural steelwork for the new coaling plant, Queenstown, for South African Railways and Harbours. Department of Overseas Trade, 35, Old Queen-st., S.W.1. (Ref. A.X. 7378.)

Siam.—Superstructures.—Steel bridge superstructures, for Siamese State Railway. Department of Overseas Trade, 35, Old Queen-st., S.W.1. (Ref. A.X. 7098.)

Swadlincote.—Reservoir.—Service reservoir of about 3 million gallons capacity and for the construction of about 1,600 yds. of 15-in. pumping main and 1,400 yds. of 14-in. supply main, etc., John Taylor & Sons, Caxton House, Westminster, S.W.1. Dep. £5.

ROAD, SEWERAGE, AND WATER WORKS

FEBRUARY 11.

Blean.—Tar Painting.—About 400,000 yds. super. on roads, for R.D.C. F. A. Ward, S. and E.

Essex.—Road.—Construction of bridge and approaches of reinforced concrete, with approach embankments and diversions of parts of adjacent roads, and a small widening at Wadham Lodge Farm, including the maintenance of railway and road traffic through the site of the works, for M.T. Chief Engineer, Roads Department, Ministry of Transport, 7, Whitehall-gardens, S.W.1. Dep. £25.

Glasgow.—Sewer.—15 in. pipe sewer in Carmunnock-rd., for T.C. D. Stenhouse, T.C.

Hereford.—Tar Painting.—277,000 super. yds., approximately, tar painting works, to be carried out on main and district roads, for T.C. City E.

Knaresborough.—Improvements.—Also widening of Leeds and Harrogate main road at Almsford-bank, and in vicinity of Almsford-bridge, for West Riding C.C. West Riding Surveyor. Dep. £1.

Leighton Buzzard. — Water Supply. — Improvements and additions to the water supply, for the Leighton Buzzard U.D.C. Parker, Pearson & Ross Hooper, engineers, Dallas Chambers, Chippenham, Wilts. Dep. £5.

Leighton Buzzard. — Sewerage Disposal Works.—Alterations and additions, supply of machinery, etc., in connection with above scheme, for the Leighton Buzzard U.D.C. B. H. Robjant, S., Council Offices.

Manchester.—Sewering, etc.—Ezard-st., Openshaw, for Manchester Corporation. Paving, etc., Department (District Surveyor's Office), Town Hall. Dep. £1 1s.

Manchester.—Sewering.—And draining, paving (with tarmacadam and concrete), flagging (artificial), etc., the streets on the Barlow Moor-rd. estate—Hardy-lane and Area No. 1, for Corporation. C.E.'s Office (District Surveyors' Department), Town Hall, Manchester. Dep. £1 1s.

Minehead.—Sewer.—855 yds. of 9 in. pipe sewer at Alcombe, for U.D.C. A. D. Barron, E. and S. Dep. £2 2s.

Sidcup.—Sewer.—Construction of about 2 miles of sewers, varying in size from 18 in. to 9 in., with manholes and other works incidental thereto, for U.D.C. F. Bird, Clerk. Dep. £5 5s.

Southampton.—Making-up.—Of Warren-crescent, Shirley Warren, for C.B. B.E. Dep. £3 3s.

Sutton.—Sewers.—Laying of surface-water sewers in Gander Green-lane, 704 lin. yds. of 12 in. pipes; Langley Park-rd., 320 lin. yds. of 9 in. pipes; Devonshire-rd. and Egmont-rd., 120 lin. yds. of 9 in. pipes, for Sutton-and Cheam U.D.C. W. H. Grieves, S. Dep. £3 3s.

FEBRUARY 12.

Barnes.—Making-up.—Of Queen's Ride, Rothesay-av., and Burdenshott-av., for U.D.C. F. P. Kindell, E. and S. Dep. £2 2s.

Chingford. — Improvements. — Reconstruction of "The Ridgeway," for U.D.C. E. and S. Dep. £2 2s.

Chingford.—Making-up.—Of Westward-rd. (part 2), for U.D.C. E. and S. Dep. £1 1s.

Dublin.—Asphalt.—Laying of 4,100 yds. super., approximately, of mastic asphalt, in Lower Baggot-st., for C.B. J. Sherlock, T.C. Dep. 5s.

Watford. — Making-up. — Of Cassiobury-drive (part 1), Parkside-drive (part 1), Woodland-drive (part 1), and Stratford-way, for T.C. W. W. Newman, B.E. Dep. £2 2s.

FEBRUARY 13.

Blandford Forum.—Sewerage.—6,900 yds. lin. of 12 in., 9 in. and 7 in. (mostly 9 in. and 7 in.) concrete pipe sewers, with concrete manholes, and other appurtenant works, for T.C. W. H. Radford & Son, civil engineers, Albion-chambers, King-st., Nottingham. Dep. £3 3s.

FEBRUARY 15.

St. Austell.—Surface Tarring.—Approximately 90,000 sq. yds. of roads with refined tar or other approved compound. E. D. Groves, M.Inst.M. & Cy.E., E. and S., Municipal Offices.

FEBRUARY 16.

Ecclesfield.—Asphalting.—And alteration of levels at the Ecclesfield Warren Council school, and also for the re-asphalting of flat roofs at the Dinnington Council school, for West Riding E.C. A. Rayner, 151, Cross Hill, Ecclesfield.

Norton.—Sewerage.—To be carried out in the township of Totley, for R.D.C. Surveyor, 1, Camping-lane, Woodseats, Sheffield. Dep. £2 2s.

Rawmarsh.—Roads.—Formation of about 1,700 lin. yds. of roadway of 30 ft., 36 ft., and 40 ft. widths between fences; also the construction and laying of 9 in. pipe sewers, etc., gas mains, electric lighting, etc. Jeffrey A. Tonge, M.Inst.M. & C.E., E. to the Council. Council Offices, Parkgate, Yorkshire, W.R. Dep. £2.

FEBRUARY 18.

Edmonton.—Private Street Works.—Making-up "The Orchard," within their district, for U.D.C. C.E. and S., Cuthbert Brown, M.Inst.C.E., Town Hall, N.9. Dep. £2 2s.

Guildford.—Roads, etc.—At Aldershot-rd. housing estate, for T.C. J. W. Hipwood, Assoc.M.Inst.C.E., B.S. and E., Tune-gate.

FEBRUARY 21.

Leighton Buzzard.—Alterations.—And additions at the sewage disposal works, for U.D.C. B. H. Robjant, Council Offices. Dep. £2 2s.

FEBRUARY 25.

London.—Mains.—2,770 lin. yds. of 18 in. dia. main between Finchley-rd. and the North Circular-rd.; 1,875 lin. yds. of 18 in. dia. main between Brent-st. and Holders Hill-rd.; 1,520 lin. yds. of 24 in. dia. main between the Vale, Hendon, and the North Circular-rd.; and 342 lin. yds. of 24 in. dia. and 16 in. dia. main in Westhere-rd. and Millane, N.W., for M.W.B. Chief Engineer, 173, Rosebery-av., E.C.1. Dep. £10.

Mitcham.—Street Works.—In concrete, for U.D.C. Surveyor's Office, Broadway House, Lower Mitcham.

FEBRUARY 26.

Chertsey.—Drainage.—Supply and laying of 24 in., 21 in. and 12 in. concrete tubes, and 9 in. stoneware pipe sewers, together with manholes, catchpits, and gullies, reconditioning watercourses and other appurtenant works, in Pyrford, for R.D.C. Capt. H. Beeney, Surveyor.

FEBRUARY 28.

***Greenwich.**—Sewers.—Tenders for the construction of sewer in Shooter's Hill-rd., cast-iron and stoneware pipes, for the Greenwich B.C. Borough Engineer's Department, Town Hall, Greenwich. Dep. £2 2s.

NO DATE.

Braintree.—Sewerage Works.—In the parish of Bocking, for R.D.C. James D. Haworth, M.S.E., M.R.San.I., F.G.S., 3, Central-buildings, Westminster, S.W.1. Dep. £5.

Auction Sales, Tenders, etc.

FEBRUARY 11.

London.—Alaway and Partners will sell (re Simmonds Bros., Ltd. (1925 (in liquidation). By order of the liquidators, Agincourt Works, Agincourt-rd., N.W.3), on the premises as above, stock of an exhibition and general hire contractor, auctioneers, 20, Bloomsbury-sq., W.C.1.

FEBRUARY 14.

***London.**—Messrs. Drysdale, Nurse & Co. will sell, without reserve, at the Auction Galleries, 218, Lower Clapton-rd., Clapton, E.5, the part stock of a builders' merchants. Auctioneers, 218, Lower Clapton-rd., Clapton, E.5.

FEBRUARY 19.

***London.**—Joseph Hibbard & Sons will sell without reserve, By order of Messrs. George E. Gray, Ltd., owing to the opening of new premises, known as Joinant House, Eastern-avenue, Ilford, upon the premises, Stevenage-rd., East Ham, E.6. Machinery and Timber, Saw Mill Premises. Auctioneers, 15, Newington Green, Islington, N.16.

MARCH 6.

***London.**—Daniel Smith Oakley & Garrard offer site, by order of the Westminster City Council, 139, Wardour-st and 17, Duck-lane, W.1, for letting by auction at the London Auction Mart, 155, Queen Victoria-st., E.C.4. Auctioneers, 4-5, Charles-st., St. James's-square, S.W.1.

***London.**—Daniel Smith Oakley & Garrard will offer sites 213-223 (odd), 225-235 (odd), Lewisham High-rd., on the Whidborne Estate, Deptford, S.E., for letting by auction at the London Auction Mart, 155, Queen Victoria-st., E.C.4 Auctioneers, 4-5, Charles-st., St. James's-square, S.W.1.

Public Appointments

FEBRUARY 11.

Exeter.—Assistant Clerk of Works required for about 18 months, in connection with the erection of 428 houses, Burnthouse-lane, for the Exeter City Council. John Bennett, City Architect, Exeter.

London.—A visiting teacher of interior decoration and furniture design for two full attendances a week required as from April 9 at the L.C.C. Central School of Arts and Crafts, Southampton-row, W.C.1. Edu. Officer (T.1a), County Hall, Westminster Bridge, S.E.1.

***London.**—Full time teacher of practical and theoretical plumbing required at the L.C.C. School of Building, Ferndale-rd., Brixton, S.W.4., by the L.C.C. Education Officer (T.1a), The County Hall, Westminster bridge, S.E.1.

Sheffield.—Inspector in the Dept. having control of the houses belonging to the Council (two appointments will be made, persons appointed being placed in Class C, Grade 3, of the Council's Grading Scheme) required by the Sheffield City Council. City Architect, Town Hall, Sheffield.

FEBRUARY 14.

Leicester.—(1) Fully Qualified Quantity Surveyor; (2) Senior Architectural Assistant; (3) Architectural Assistant, required in the City Engineer and Surveyor's Department, by the Leicester City Council. A. T. Gooseman, M.Inst. C.E., City Engineer and Surveyor, Town Hall, Leicester.

***Staffordshire.**—Qualified Architectural Assistant required in the County Architect's Department, by the Staffordshire C.C. W. James Nevett C.A., County-buildings, Stafford.

FEBRUARY 15.

Rotherham.—Building Inspector and Building Clerk of Works required by the Rotherham T.C., under the direction of the Borough Engineer. Vincent Turner, M.Inst.C.E., B.E., Municipal Offices, Rotherham.

FEBRUARY 18.

Durham.—Junior Architectural Assistant required by the Durham C.C. Director of Education, Shire Hall, Durham.

FEBRUARY 18.

***Somerset.**—Clerk of Works and Engineer required by the Somerset and Bath Mental Hospital Committee, Cotford, near Taunton, Somerset. A. W. Caley, clerk.

FEBRUARY 20.

***Southampton.**—Architectural Assistant in the Borough Engineer's (Education) Department required by the Southampton B.C. Town Clerk's Office, Municipal Offices, Southampton.

FEBRUARY 22.

***Surrey.**—Builders' Foreman (working) required at the London County Mental Hospital, Banstead, Sutton. Chief officer, Mental Hospitals Department, The County Hall, Westminster-bridge, S.E.1.

FEBRUARY 23.

***Bradford.**—Head of the Dept. of Civil Engineering, Architecture and Building in the Technical College required by the Bradford E.C. Dir. of Edu., Town Hall, Bradford.

FEBRUARY 25.

***London.**—Town Planning Inspector required by the Minister of Health. Director of Establishments, Ministry of Health, Whitehall, S.W.

FEBRUARY 28.

***Worcester.**—Diocesan Surveyor for Diocese of Worcester, commencing July 1. Dilapidations Board, Church House, Worcester.

APRIL 3, 4, 5.

London.—London Building Act, 1894.—District Surveyors at a London Centre, an examination of persons presenting themselves for the purpose of being examined for duties of District Surveyors. Clerk of the Council, the County Hall, Westminster Bridge, S.E.1.

NO DATE.

***Federated Malay States.**—Assistant Town Planning Superintendent required by the Government of the Federated Malay States for four years' service, with possible permanence. Apply at once, Crown Agents for the Colonies, 4, Millbank, London, S.W.1, quoting M/746.

CONTRACTS PLACED

Coventry.—BANK.—The directors of the National Provincial Bank, Ltd., London, E.C., have just accepted the tender of Messrs. J. W. Stamp & Co., of Coventry, for the erection of branch premises in High-street, Hertford-street, and Greyfriars-street. The bank architect is Mr. F. C. R. Palmer, F.R.I.B.A., in conjunction with Mr. W. F. C. Holden, F.R.I.B.A., assistant architect.

Kingston.—HOUSES.—Plans have been approved for the development of the Fernhall Gardens estate. The builders are Messrs. C. & E. Pavy, Upper Ham-road, and the architect is Mr. E. J. Partridge, F.R.I.B.A., Bank-chambers, Richmond.

Nottingham.—CONVERSION.—The British and Colonial Furniture Co., Ltd., 7, Cavendish-square, W.1, have acquired premises for conversion into branch showrooms. The contractors are Messrs. Fish & Son, Nottingham The plans have been prepared by Messrs. Lewis Solomon & Son, 21, Hart-street, Bloomsbury, W.C.

PROPOSED NEW BUILDINGS AND OTHER WORKS*

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B. of E. for Board of Education; M.A.B. for Metropolitan Asylums Board; and M.W.B. for Metropolitan Water Board; Borough Surveyor, B.S.; Borough Engineer, B.E.; District Surveyor, D.S.; Clerk, C.; Town Clerk, T.C.; County Engineer, C.E.; County Surveyor, C.S.; County Architect, C.A.; Surveyor, S.; Engineer, E.; Borough Architect, B.A.; Architect, A.

Ashton-under-Lyne.—Infirmary is to have out-patient's department. Quantities by S. Thomas, 6, Brown-st., Manchester. Architects are Thomas Worthington & Sons, FF.R.I.B.A., 178, Oxford-rd., Manchester.

Barrow.—R.D.C. is to erect 20 houses at each of: Birstall, Mountsorrell, Rothley, and Syleby; and 5 at Thurcaston.

Bath.—T.C. is to apply to Electricity Commission for borrowing powers for £2,517 to build and equip a sub-station in Sydney-gardens. T.C. approved:—Alterations to "Edinburgh Castle," public-house, Philip-st.; alterations to Gays Hill Tavern; 5 shops at Coronation-av.; alterations and additions to Kingswood school; 10 garages in rear of Evelyn-rd.

Beaconsfield.—Hall Barn Estate Co., Ltd., has acquired part of Hall Barn estate for development

Bradford.—C.C. have sanctioned new public baths near to Thorpe Schools, Idle. Plans by the City Architect, Mr. W. Williamson, F.R.I.B.A.

Braintree.—R.D.C.'s scheme to borrow £1,800 for housing at Panfield-lane, Bocking, is sanctioned.

Bridlington.—£12,600 harbour improvements are proposed by Harbour Board.

Brighton.—T.C. is to proceed with £174,000 bathing pool scheme.

Bromley.—T.C. passed plans:—40 houses, Palace-view, and 12 in Forde-av., H. F. Theburn; 10 houses, Rochester-av., H. A. Pierpoint; 4 houses, Babbacombe-rd., Waterer & Dickins; 3 houses, Mosslea-rd., A. Jones; additions to Phillips Memorial Hospital, E. Ford Duncanson.

Cadishead.—U.D.C. propose another 60 houses on the Lord-st. and Fir site. Also 25 more houses at Higher Irlam.

Canvey Island.—Plans have been approved for a bridge connecting Canvey Island with the Essex mainland. The cost will be £15,000, one-third of which will be paid by the Treasury.

Carlisle.—M.H. sanctioned Corporation's application to borrow £109,361 for erection of 299 houses.

Carshalton.—U.D.C. passed plans: 5 houses, Grove Wood Hill, for Morgan, Baines & Clark; 4 houses, Farm-rd. and 2 houses, Prior-av., for A. R. Garnett; extension to Day Nursery, Camden-rd., for the Day Nursery Committee; 3 pairs semi-detached houses, Sussex-rd., for Fuller & French; hotel, Rose-hill, for Nalder & Collyer, Ltd.

Chadwell Heath.—Plans are prepared for 5 shops in Green-lane, for J. G. Tilley. Edward Meredith, A.R.I.B.A., 7, Goodmayes-rd., Goodmayes.

Chelmsford.—T.C. passed plans: 100 houses in North-av. and Ockelford-av., for Corporation (sub.); 3 pairs of houses in Writtle-rd., for A. B. Parker; demolition of the Rose and Crown and plan for a new building in Rainsford-rd., for Seabrooke & Sons, Ltd.; 2 houses in Goldlay-av., for Mr. Holmes; amended plans of shop, warehouse, and offices in Duke-st., for H. J. Harrison.

Cleckheaton.—Spenborough U.D.C. propose public conveniences at Hartshead Moor.

Colchester.—War Office will erect central workshops at the Colchester Depot, at £25,000. Plans by Royal Engineers, Whitehall, S.W.1.

Conisborough (Yorks).—M.H. sanction is sought to borrow £10,000 for 22 houses.

Coventry.—T.C. passed: 20 houses, Three Spires-avenue, for Midland Housing, Ltd.; cinema, Spon-st., for Philpot Bros.; 36 houses, Swan-lane, for Ives & Rushby; fire station, Canal-rd., for Alfred Herbert, Ltd.; cinema and variety theatre, Jordan Well, for Denman Construction Co., Ltd.; bank premises at Radford, for Lloyds Bank, Ltd., and the Midland Bank, Ltd.; factory, Widdrington-rd., for the Midland Motor Body Co.—A scheme has been submitted for the lay-out of the Hill Farm housing site, Radford. The lay-out provides for 536 houses, a shopping centre, open spaces, school site, sites for other buildings, street improvements. The area of the site is 53 acres.

Dagenham.—Block of shops are to go up in Oxlow-lane. Plans by Edward Meredith, A.R.I.B.A., 7, Goodmayes-rd., Goodmayes, for Holland Bros.

Darlington.—Corporation Health Committee is to erect public abattoir at Bank Top Cattle Market.

Doncaster.—R.D.C. proposes bridge, at £3,500, over river at Kirk Smeaton. Passed plans: At

* See also our List of Contracts, Competitions, etc.

Edenthorpe, 56 houses, W. Firth, Ltd., Thomson & Dixon, of Doncaster, and the Barmborough Estate Company; at Sprotborough, 12 houses by S. Marshall, builder, Doncaster, and 10 by H. & L. Marshall, Doncaster; at Askern, 42, by the Askern Coal and Iron Company, being an addition to their colliery village of Instonville.

Dublin.—Following plans for new buildings and works of reconstruction been passed by H. T. O'Rourke, City Architect:—100, James's-st. (boundary wall), Arthur Guinness, Son & Co., Ltd.; Cabra-rd. and Annamoe-rd. (32 houses), W. and G. Harrison; Cremore-rd. and Cremore-av. (28 houses), Alex Strain; Ormond-rd. (10 houses), W. and G. Harrison.

Dudley.—E.C. resolved that plans of proposed alterations to the following schools be forwarded to the Board of Education: St. Thomas's, St. James's and St. Edmund's Infant schools; St. John's Church school; Netherton Church school; Jesson's, Charity Boys' school; and Blue Coat Charity Boys' school. It was decided also that plans of the proposed temporary school for infants and juniors on the Brewery Fields estate be forwarded.

Dukinfield.—Percy Howard, A.R.I.B.A., 88, Mosley-st., Manchester, is preparing plans for the Dukinfield Corporation for new girls' central school off Pickford-lane, and structural alterations to the Crescent-rd. school, Dukinfield.

Eastbourne.—48 houses are planned in Hampton-park for the Southern Railway by P. D. Stonham & Son, Hadley House.

East Barnet.—U.D.C. passed plans for 23 houses in Greenhill Park, for F. A. Leak.

East Ham.—B.C. passed plans: 6 houses and 6 garages, 301-311, Katherine-rd., J. W. Lohden; addition to "Roman Urn," Roman-rd., corner of High-st. South, S. Yeo, A.R.I.B.A.; rebuilding after fire, two-story brick building rear 56, Church-rd., W. G. Bridgman & Sons, Ltd.; conversion of 2 shops and dwelling houses, 5 and 6, Rancliffe-rd., F. Bsen; 8 lock-up garages and stores over old stables, west of 1, Lloyd-rd., J. W. Lohden; dairy on vacant land corner Creighton-av. and Barking-rd., London Co-operative Society.

East Twickenham.—The Aluminium Paint & Vessel Co., Ltd., Wandsworth, S.W., are to acquire part of the Berliet Works in Cambridge-rd. for conversion into a foundry.

Ebbw Vale.—U.D.C. are to build 40 houses. Tenders are to be invited. Plans by surveyor.

Ecclesfield.—£2,500 improvements are proposed at Rawson Infants' schools. Plans by T. Henson Robinson, A.R.I.B.A., Mazda-buildings, Campo-lane, Sheffield.

Edmonton.—U.D.C. approve: 6 lock-up shops at Village-rd. and Church-st., by Bethell, Swannell & Darnford; 8 houses in Colne-rd., by C. F. Hartshorne.

Grassington.—The West Riding E.C. propose new school.

Great Britain.—A. H. Neisner, president of Neisner Brothers, Incorporated, operating a chain of 35 stores in the United States, has stated that the company had acquired a large interest in the British Home Stores, Ltd., of Aldersgate-st., E.C.1, and was preparing to build up in England a chain of stores comparable to the American chain. Sites will be obtained in most large centres for the new branches. Architects are John S. Quilter & Son, of 3, St. James'-st., S.W.1.

Halifax.—T.C. propose £35,000 improvements to Borough Fever Hospital. M.H. sanction is sought. Revised plans for children's sanatorium at Shelf were approved.

Hampton.—This branch of the British Legion propose new headquarters. The hon. secretary is W. Parrott.

Hartlepool.—T.C. proposes 11 houses.

Hayes (Middlesex).—A benefactor has given half the cost of a new Central Hall, to be erected in Station-rd. Rev. Charles Hulbert has scheme in hand.

Hendon.—R.D.C. passed plans:—9 houses at The Rise, Edgware, for F. Howkins; 15 shops and flats at Station-rd., North Harrow, for Imperial Property Investment Co.; 52 houses in New-rd., Pinner Wood estate, for H. J. Sawyer; 20 houses in Holmdene-av., Pinner, for T. Higgs; 27 houses in Northumberland-rd., Pinner, for E. S. Reid; sports pavilion at rear of Parkfield-av., for H. Walker.

Heston and Isleworth.—U.D.C. passed plans: Roper Son & Chapman, alterations, 138 and 140, High-st., Hounslow; P. Chase Gardener & Co., 5 shops, Kingsley-rd.

Hitchin.—U.D.C. instructed surveyor to prepare plans and specifications for erection of 37 non-parlour type houses and 8 flats at West Mill.

Huddersfield.—The British Dye Stuffs Corporation, Ltd., propose extensions to works at Turnbridge and Dalton Works. Plans by head offices, Hexagon House, Blackley, Manchester.

Ilfracombe.—U.D.C. propose alterations and improvements to the west wing of the Ilfracombe Hotel.

Ireland.—The following contracts have been placed by the Commissioners of Public Works:—Allihies Garda Siochana Station, Co. Cork, erection of station, Patrick O'Sullivan, Castletownbere; Ballindereen National School, Co. Galway, enlarging of school, P. Burke, Ballindereen, Kilcolgan, Co. Galway; Ballyforan Garda Siochana Station, Co. Roscommon, reconstruction, M. Cahill, Ahascragh, Ballinasloe; Cloyne Garda Siochana Station, Co. Cork, erection of station, J. J. Coffey, Midleton; Doochary National School, Co. Donegal, erection of school, M. Reynolds, Eslin Bridge, Mohill; Four Courts, Dublin, hot water heating installation, Haden's Engineering Co., Ltd., Dublin; Four Courts, Dublin, roofing of central block, J. & P. Good, Ltd., Dublin; Gortahork National School, Co. Donegal, erection of school, Maloney & Taylor, Coollooney, Co. Sligo; Newcastle National School, Co. Dublin, erection of school, McEntaggart Bros., Nobber, Co. Meath; Swinford Garda Siochana Station, Co. Mayo, reconstruction, J. Molloy, Ardnaree, Ballina; Tournakeady Preparatory Training College, Co. Mayo, erection, Murphy Bros., Castlewood-av., Rathmines.

Kent.—The Board of Education have approved of plans at Bexley of proposed central school for boys; new school for infants and juniors at East Wickham, ditto on the Woolwich-rd. site; 2 practical rooms, Bexley Heath Central School, and additional classrooms at Welling Infants' School.

Kingston-on-Thames.—The governors of the Victoria Hospital in Coombe-rd. have instructed J. W. Spink, architect, of Clarence-chambers, London-rd., to plan new paying patients' wards, children's ward, reception hall, staff accommodation, etc. The quantity surveyor is Arthur Boxall, 7, Queen Anne's Gate, S.W.1.

Kingston-on-Thames.—A motor showroom and garage is to be planned in Vicarage-rd. by S. P. Anderson, architect, Cecil House, High-st. No contract yet placed.

Kingston-on-Thames.—T.C. passed plans:—14, Park-rd. (rear of), 8 lock-up garages, V. J. Prince, 14, Park-rd.; Vicarage-rd., showroom and garage, S. P. Anderson, Creek House, High-st.; Union-st., 2 lock-up shops and store over, H. Offer, Ltd., Riverside Works, Hampton Wick; Studland-rd., 3 houses, A. H. Osborne, 80, Staunton-rd.

Leeds.—F. Mitchell & Sons, architect, Upper Fountain-st., plan warehouse at Pontefract-lane and Keeton-st.

Llandudno.—A proposal to build a colonnade shelter on rock side of road leading to Happy Valley is to be considered by Council. Designs been prepared by G. A. Humphreys.

Lockwood (Yorks).—Joseph Berry & Sons, F.R.I.B.A., 3, Market-place, Huddersfield, are architects for Memorial Vestries at the Parish Church.

London (Camberwell).—Corporation passed: Line of shops at 125-131, Queen's-rd., for G. Vernon; building on west side of Basing-rd., for H.M.O.W.; building upon site of Nos. 328-330, Camberwell New rd., for the L.G.O.C.

London (Lewisham).—B.C. recommend that, subject to approval of M.H., Council acquire from B.G. site of premises known as "The Priory," in High-st., Lewisham.—Plans passed:—F. G. Barnes, 7 houses, Woodcombe-crescent.

London (Stepney).—Plans passed by B.C.:—B. J. Belsher, building at Regents Canal Wharf, Medland-st.; L.C.C., shop premises with living accommodation thereover in Shepherd-st. and Wentworth-st.—Council recommend that £500 be adopted and application be made to M.H. for sanction to purchase of site in New Gravel-lane and Prusom-st. for purpose of erection of housing accommodation.

London (Wandsworth).—B.C. passed plans: J. Burgess & Sons, Ltd., "The Champion Stores" beer house, on site junction of Warple-rd. and Warple-way, Fairfield; Bleach & Dorey, Ltd., alterations and additions to "The Park Tavern" public-house, Merton-rd., Southfield; Burgess & Pavey, 10 lock-up garages on site at rear of 189, Balham High-rd., Balham; Kildare Amateur Athletic Association, dressing rooms, bath rooms and w.c.'s, at Kildare Athletic Sports Ground, Roehampton-lane, Putney; E. H. Hayes, Ltd., 14 houses, Valleyfield-rd., Streatham; Streatham Properties, Ltd., cinema on site at junction of Streatham High-rd. and Pendennis-rd., Streatham; A. Soden, 7 houses, with garages, on site in Broadlands-av., Balham, at its junction with De Montfort-rd., by Marcus Estates, Ltd.

London (Woolwich).—Corporation propose further site for houses.

Manchester.—District Bank, Ltd., Spring-gardens, Manchester, propose alterations and additions to premises at Great Clowe-street, Broughton, Francis Jones & H. A. Dalrymple, F. & A.R.I.B.A., 178, Oxford-rd., Manchester, architects.

Manchester.—Rusholme Assembly Halls and Residential Flats, Ltd., propose new 4-story £22,000 building at Oxford-rd., All Saint's. E. A. Newton, 169, Oxford-rd., Manchester, architect.

Manchester.—C.C. approved: J. Gourley, 8, Bradshaw-st., Shudehill, 5 houses, Station-rd., Crumpsall; Moores & Goldstone, Ltd., warehouse, Broughton-lane, Cheetham; Gray & Evans, 51, North John-st., Liverpool, cinema and shops, Rochdale-rd., Blackley; H. Barnes, Ltd., Chorlton-cum-Hardy, 4 shops and houses, Burnage-lane, Burnage.

Merton.—Mann, Crossman & Paulin, Ltd., brewers, Whitechapel-rd., E.1. Plans at the corner of the Kingston By-pass road, opposite Lower Downes-rd., S.W., for new hotel, the "Bushey Mead" Hotel. Plans by Mr. William Stewart, F.R.I.B.A., Newlyn House, 4-5, Aldgate, E.C.1.

Marton.—St. Paul's Church are to erect parochial hall on site of present school. Plans by F. B. Freeman, architect, 21, Wood-st., Bolton.

Middlesbrough.—S. H. Clarke, 89, Grange-rd., is architect for rebuilding Station Arms Hotel, Billingham, for James Eadie, Ltd., brewers, Burton-on-Trent.

Mitcham.—Mr. Isaac Wilson, of Mitcham, proposes to build 36 cottage homes for the aged poor, at £20,000.

Nelson.—It is proposed to transfer the Railway Hotel to another site. Plans by Hitchon & Pickup, 46, Manchester-rd., Burnley.

Newcastle-on-Tyne.—British and Colonial Furniture Co., Ltd., of 7, Cavendish-sq., W.1, propose block of shops and showrooms. Plans by N. K. Glass, Saville-row, Newcastle-on-Tyne.

Newport (Mon.).—R.D.C. proposes cottages.

Northolt.—Tenders are to be soon invited for new "Swan" public-house. The architects are F. J. Fisher & Sons, 35, John-st., Bloomsbury, W.C.

Oldham.—B.G. on corner of Manchester-rd. and Drury-lane, propose public conveniences.

Ovenden.—£1,700 extensions are proposed to the schools of St. George's Church.

Pevensey.—Southdown Omnibus Services, Ltd., of Brighton and Eastbourne, are to enlarge depot at Pevensey Bay. Plans by P. D. Stonham & Son, Hadley House, Eastbourne. No contracts placed yet.

Rochdale.—T.C. propose 73 houses on a site at Milnrow-rd.

Shilbottle.—M.H. sanctioned 12 houses for aged people by Alnwick R.D.C.

Smallburgh.—R.D.C. proposes houses at Paston and Bacton.

Stamford.—Infirmary is to be extended, at £17,000.

St. Ives (Cornwall).—B.S. has been instructed to plan as many houses as possible on the Recreation Ground site.

Stone, Staffs.—U.D.C. proposes 20 houses.

Sunderland.—Football Club plans a new grandstand for 18,000 spectators, including dressing-rooms, baths and offices.

Taunton.—R.D.C. decided to erect further 40 houses. Surveyor, S. S. Orchard.

Thurlstone, Yorks.—U.D.C. considering houses.

Torquay.—Syndicate is to enlarge Palm Court Hotel by new wing to contain 86 bedrooms, large restaurant, ballroom, etc. Plans by Col. James A. Adamson, 56, Victoria-st., S.W. The quantity surveyors are Matheson & Fraser, of Glasgow.

Twickenham.—Among the plans passed by B.C. are: A. Pascall & Son, Ltd., 9 houses, South Side of Cross Deep-gardens; H. L. Moyle, architect, 20 garages, Heathcote-rd., and 4 houses and garages, Spencer-rd.; E. H. Carter, 8 houses, Sixth Cross-rd.

Tiverton.—R.D.C. are to erect 61 houses as follows: Uffculme, 14; Cullompton, 24; Halberton 8; Washfield, 2; Loxbeare, 2; Sampford Peverell, 7; Uplowman, 4. Architect, Mr. Bamsey.

Waltham Cross.—R.D.C. are to purchase further land with view to erecting more houses for working classes.

Warrington.—Greenall Whitley & Co., Ltd., Wilderspool Brewery, Warrington, propose licensed premises on a site near Manchester-rd. and Knutsford-rd.

Wayland.—R.D.C. is to purchase land next Besthorpe-rd., Attleborough, from Charity Land Trustees, for housing.

Welwyn.—R.D.C. propose to build 20 houses in Welwyn and 10 at Woolmer Green, if suitable sites can be found.

Whetstone.—Site has been acquired for new church, dedicated to St. Mary Magdalene, by the Fathers of Our Lady of Sion, of Oakleigh-park North, N.20. The Priest is the Father M. Leroux.

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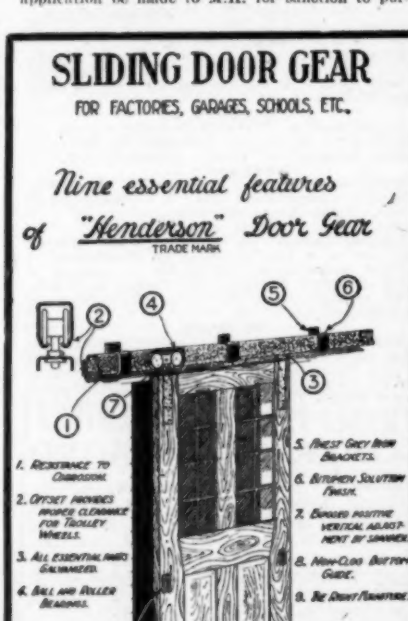
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2 in. to 2½ in. sawn one side slabs (random sizes) „ 1 6½
1½ in. to 2 in. ditto, ditto „ 1 3½

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Delivered at any Goods Station, London.
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4 in. sawn two sides slabs (random sizes) „ 2 1½
3 in. ditto ditto „ 2 10
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2½ × 7	21 0	3 × 4	21 0

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TONGUED AND GROOVED FLOORING

Inches.	per sq.
1	24/-
1¼	30/-
1½	34/-

BATTENS. s. d.
¾ × 2 ..... per 100 ft. 2 6

MATCHING (BEST).

Inches.	per sq.
⅝	16/6
¾	19/-
1	24/-

SAWN LATHS. s. d.
Per bundle 2 6

1" AND UP THICK.

	£ s. d.	£ s. d.
Dry Austrian Wainscot, per ft. cube	0 16 0	to 0 18 0
Dry American and/or Japanese Figured Oak, ft. cube	0 14 0	to 0 15 0
Dry American and/or Japanese Plain Oak, ft. cube	0 10 0	to 0 13 0
Dry sq. edged Honduras Mahogany, ft. cube	0 15 0	to 0 18 0
Dry Log cut Honduras Mahogany, ft. cube	0 16 0	to 1 1 0
Dry Cuba Mahogany, ft. cube	1 1 0	to 1 10 0
Dry Teak, ft. cube	0 13 0	to 0 15 0
Dry American Whitewood, ft. cube	0 10 0	to 0 14 0
Best Scotch Glue, per cwt.	4 10 0	to —
Liquid Glue, per cwt.	4 7 0	to 5 10 0

SLATES.

First quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000.

	£ s. d.		£ s. d.
24 by 12	32 18 4	18 by 10	18 12 11
22 by 12	29 17 11	18 by 9	16 9 2
22 by 11	27 14 2	16 by 10	15 12 6
20 by 12	26 5 0	16 by 8	12 3 9
20 by 10	22 10 0		

TILES.

Delivered at London rate stations in full truckloads of not less than 6 tons. Per 1,000. f.o.r. London.

	£ s. d.
Best machine-made tiles from Broseley or Staffordshire district	5 7 6
ditto hand-made ditto	5 17 6
Ornamental ditto	6 2 6
Hip and valley tiles (per dozen) { Hand-made	0 9 6
{ Machine-made	0 9 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION, PER TON—

	£ s. d.
R.S. Joists, cut and fitted	12 10 0
Plain Compound Girders	14 10 0
„ Stanchions	16 10 0
In Roof Work	19 10 0

MILD STEEL ROUNDS.—To London Station, per ton

Diameter.	£ s. d.	Diameter.	£ s. d.
½ in.	12 0 0	⅝ in. to ¾ in.	10 15 0
⅜ in.	11 0 0	⅞ in. to 2½ in.	10 10 0

WROUGHT-IRON TUBES AND FITTINGS—
(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward, if sent from London Stocks.)

	Tubes. Wrought Mild Steel.	Tubes. Genuine Staffs. Iron.	Fittings. ½ in. and under.	Fittings. Over ½ in.	Flanges. ½ in. and under.	Flanges. Over ½ in.
	%	%	%	%	%	%
Gas	67½	50	42½	45	52½	55
Water	63½	46½	37½	40	47½	50
Steam	60	42½	32½	35	42½	45
Galv. gas	55	37½	32½	35	42½	45
Galv. water	50	32½	27½	30	37½	40
Galv. steam	45	27½	22½	25	32½	35

C.I.—HALF-ROUND GUTTERS—London Prices ex Works

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
2 in.	1/3½	11½d.	3½d.
3½ in.	1/4½	1/1½	3½d.
4 in.	1/6	1/3	3½d.
4½ in.	1/7½	1/4½	4½d.
5 in.	1/10½	1/6½	5½d.

O.G. GUTTERS.

3 in.	1/8	1/4½	3½d.
3½ in.	1/8	1/4½	3½d.
4 in.	1/9½	1/4½	3½d.
4½ in.	1/11½	1/7½	4½d.
5 in.	2/4½	1/10½	5½d.

RAIN-WATER PIPES, &c.

Per yd. in 6 ft.	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in. plain	1/10½	1/3	1/9½
2½ in. „	2/0½	1/4½	2/1½
3 in. „	2/6	1/9	2/7½
3½ in.	2/11½	2/0½	3/0½
4 in. „	3/5	2/6½	3/8½

L.C.C. COATED SOIL PIPES—London Prices ex Works.

	Bends, stock Pipe. angles.		Branches, stock angles.	
	s. d.	s. d.	s. d.	
2 in. per yd. in 6 fts. plain	2 3	2 4½	2 10	
2½ in. „	3 9	2 7½	3 7	
3 in. „	4 6	2 10	4 2½	
3½ in. „	4 11½	3 7	4 11½	
4 in. „	5 5½	4 0½	5 9	

L.C.C. COATED DRAIN PIPES—London Price ex Works

	Bends, stock Pipe. angles.		Branches, stock angles.	
	s. d.	s. d.	s. d.	
3 in. per yd. in 9ft. lengths	4 4	5 1	8 0½	
4 in. „ „	4 10	5 8	10 0	
5 in. „ „	6 6	10 10	17 1	
6 in. „ „	6 8	13 2	21 9	

Gasket for jointing, 38/6 per cwt.

IRON—	Per ton in London. £ s. d.		£ s. d.
Common bars	11 0 0	to	12 0 0
Staffordshire Crown Bars—Good merchant quality	11 10 0	to	12 10 0
Staffordshire Marked Bars	14 0 0	...	15 0 0
Mild Steel Bars	10 0 0	...	11 0 0
Steel Bars, Ferro-Concrete quality, basis price	10 0 0	...	11 0 0
Hoop iron, basis price	11 10 0	...	12 10 0
„ Galvanised	27 0 0	...	28 0 0
Soft Steel Sheets, Black—Ordinary sizes, to 20 g.	13 0 0	...	14 0 0
„ „ „ 24 g.	14 0 0	...	15 0 0
„ „ „ 26 g.	16 0 0	...	17 0 0
Sheets Flat Best Soft Steel, C.R. and C.A quality—Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	15 0 0	...	16 0 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.	16 0 0	...	17 0 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g.	18 0 0	...	20 0 0

No. 1 quality £4 per ton extra.

Flat and Galvanised Corrugated Sheets—Ordinary sizes, 6 ft. to 9 ft. to 20 g.	16 10 0	...	17 0 0
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	17 0 0	...	18 0 0
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	20 0 0	...	21 0 0
Sheets Galvanised Flat, Best quality—Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. to 20 g. and thicker	21 0 0	...	22 0 0
Best Soft Steel Sheets, 22 g. and 24 g.	23 0 0	...	25 0 0
Best Soft Steel Sheets, 26 g.	24 10 0	...	25 10 0
Cut Nails, 3 in. to 6 in.	18 0 0		

(Under 3 in. usual trade extras.)

METAL WINDOWS.—Standard sizes, suitable for complete houses, including all fittings, painting two coats, and delivery to job, average price about 1s. 4d. to 1s. 7d. per foot super.

LEAD, &c.

(Delivered in London.)	£ s. d.
LEAD—Sheet, English, 4 lb. and up	30 0 0
Pipe in coils	30 10 0
Soil pipe	33 10 0
Compo pipe	34 10 0

NOTE.—Country delivery, 20s. per ton extra; lots under 3 cwt. 3s. per cwt. extra, and over 3 cwt. and under 5 cwt., 1s. 6d. per cwt. extra. Cut to sizes, 5s. cwt. extra.

Old lead, ex London area, at Mills per ton	20 5 0

COPPER.

	s. d.
Seamless Copper tubes (basis) per lb.	1 1½
Strong sheet „	1 0
Thin „	1 1
Copper nails „	2 3
Copper wire „	2 4

PLUMBERS' BRASS WORK.
Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB COCKS FOR IRON.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
29/-	45/-	76/-	153/-	246/-	510/- per doz.

NEW RIVER PATTERN SCREW DOWN STOP COCKS AND UNIONS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
41/6	62/-	92/-	174/-	300/-	568/- per doz.

RIVER PATTERN SCREW DOWN MAIN FERRULES.

½ in.	¾ in.	1 in.
39/6	60/-	116/6 per doz.

CAPS AND SCREWS.

1¼ in.	1½ in.	2 in.	3 in.	3½ in.	4 in.
7/6	10/-	14/-	23/-	30/-	42/- per doz.

DOUBLE NUT BOILER SCREWS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
7/6	11/-	17/-	29/-	36/-	63/- per doz.

BRASS SLEEVES.

1½ in.	2 in.	3 in.	3½ in.	4 in.
10/-	12/-	20/-	24/-	31/- per doz.

NEW RIVER PATTERN CROYDON BALL VALVES, S.F.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.
35/-	56/-	98/-	162/-	228/- per doz.

DRAWN LEAD P. & S. TRAPS WITH BRASS CLEANING SCREW.

1¼ in.	1½ in.	2 in.	3 in.	
8 lbs. P. traps	33/-	41/-	56/-	101/- per doz.
8 lbs. S. traps	35/-	45/-	66/-	126/- „

TIN.—English Ingots, 2/6 per lb. SOLDER.—Plumber's 1/1, Tinmen's 1/4, Blowpipe 1/5 per lb.

PAINTS, &c.

Raw Linseed Oil, in pipes per gallon		0 2 8	
„ „ „	in barrels „	0 2 10	
„ „ „	in drums „	0 2 9	
Boiled „ „	in barrels „	0 2 9	
„ „ „	in drums „	0 2 8	
Turpentine in barrels		0 4 3	
„	in drums (10 galls) „	0 4 5	
Genuine Ground English White Lead, per ton		52 0 0	

(In not less than 5-cwt. casks.)

Extra for 1-cwt. kegs over 5-cwt. casks is 5/9 cwt.

* The information given on this page has been specially compiled for THE BUILDER, and is copyright. The aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

PRICES CURRENT OF MATERIALS (*contd.*)

PAINTS, &c. (*contd.*)

GENUINE WHITE LEAD PAINT.

		£	s.	d.
"Father Thames," "Nine Elms," "Park," "Supremus," "St. Paul's," "Morganswyte," "Polseco," "J." Brand, and other best brands (in 14 lb. tins) not less than 5 cwt. lots ..	per ton delivered	70	10	0
Red Lead, Dry (packages extra) ..	per ton	39	10	0
Best Linseed Oil Putty	per cwt.	0	15	0
Fillicol	"	0	15	6
Size. XD quality	ftkn.	0	3	6

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

	Per ft.		Per ft.
15 oz. fourths ..	2½d.	32 oz. fourths	6½d.
15 " thirds ..	3½d.	32 " thirds	8½d.
21 " fourths ..	3½d.	Obscured Sheet, 15 oz.	3½d.
21 " thirds ..	4d.	" 21 "	4½d.
26 " fourths ..	4d.	Fluted, 15oz.6½d., 21oz.	6d.
26 " thirds ..	5½d.	En'lled, 15 oz. 4½d., 21oz.	6d.

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED plate in CRATES OF STOCK SIZES.

	Per ft.
¼ Rolled plate	4½d.
¼ Rough rolled	5½d.
¼ Rough rolled	5½d.
Figured Rolled, Baltic, Oceanic, Arctic Stippolyte, and small and large Flemish White..	5½d.
Ditto, tinted	8½d.
Rolled Sheet	4½d.
White Rolled Cathedral	4½d.
Tinted do.	6½d.

Cast plate is same price as rough rolled.

VARNISHES, &c.

		Per Gallon. £	s.	d.
Oak Varnish	Outside	0	14	0
Fine ditto	ditto	0	16	0
Fine Copal	ditto	0	18	0
Pale Copal	ditto	1	0	0
Pale Copal Carriage	ditto	1	4	0
Best ditto	ditto	1	12	0
Floor Varnish	Inside	0	18	0
Fine Pale Paper	ditto	0	13	0
Fine Copal Cabinet	ditto	1	2	6
Fine Copal Flatting	ditto	1	0	6
Hard Drying Oak	ditto	0	18	0
Fine Hard Drying Oak	ditto	0	19	0
Fine Copal Varnish	ditto	1	0	0
Pale ditto	ditto	1	2	0
Best ditto	ditto	1	12	0
Best Japan Gold Size		0	12	6
Best Black Japan		0	10	6
Oak and Mahogany Stain (water)		0	12	0
Brunswick Black		0	7	6
Berlin Black		0	14	0
Knotting (patent)		1	5	0
French and Brush Polish		0	17	0
Liquid Dryers in Terebine		0	9	0
Cuirass Black Enamel		0	7	6

HOUSING PROGRESS IN SCOTLAND

The following figures show the progress that has been made in State-aided housing schemes in Scotland to December 31, 1928 :—

	Completed.	Under Construction
1919 Act	25,129	—
do. (by public utility societies)	421	—
Private subsidy schemes (1919 Additional Powers Act)	2,324	—
Slum clearance schemes ...	8,688	2,683
1923 Act :—		
By local authorities ...	4,006	—
By private enterprise ...	14,502	2,378
By public utility societies	80	—
1924 Act :—		
By local authorities ...	29,668	10,165
By private enterprise ...	549	795
By public utility societies	77	50
Demonstration houses ...	17	—
Steel houses erected on behalf of Government by Scottish National Housing Company	2,552	—
	88,013	16,071

NEW BUILDINGS IN SCOTLAND

Aberdeen.—HOUSES.—Housing Committee has decided to erect 300 new dwellings (half of them in granite) on a site adjoining King-street, in the Old Aberdeen district.

St. Andrews.—HOUSES.—Tenders are invited, by February 18, for all works in connection with the erection of four houses at Langlands, for the Town Council, whose architect is Mr. Chas. F. Anderson, 147, Market-street, St. Andrews. A £1 1s. deposit is required.

Glasgow.—SEWAGE DISPOSAL PLANT.—The Office of Public Works, 64, Cochrane-street, Glasgow, is calling for tenders, by February 13, for the construction of a sewage disposal plant at Bellefield Sanatorium, Lanark. £2 2s. deposit is required.

Glasgow.—STEEL BRIDGE.—The Corporation calls for tenders, by March 2, for a steel-plate-web girder bridge of three spans over the L. & N.E.R. line at Barrachnie. The engineer is Mr. D. A. Donald, 271, Alexandra-parade, Glasgow. £3 3s. deposit is required.

Kelso.—HOUSES.—The Town Council asks for tenders, by February 10, for all trades in connection with erection of 16 flatted houses. The Burgh Surveyor is Mr. R. W. Macvey, C.E., Kelso. A £1 1s. deposit is required.

SCHOOL BUILDING IN ESSEX.

THE Essex Education Committee is to submit to the Board of Education the following programme for new schools proposed for the County of Essex :—

(*a*) Higher Education : Brentwood County High School, 1931-2, completion of school; Clacton County High, 1931-2, assembly hall and gymnasium; Dagenham, 1930-1, two sites, 1932-3, technical and secondary schools; Earls Colne Grammar, 1932-3, additional classroom; Leyton Technical, 1930-31, new accommodation; Romford Royal Liberty, 1930-31, gymnasium; Romford County High, 1931-2, extensions; Walthamstow Sir George Monoux Grammar, 1931-2, gymnasium and dining-room; Walthamstow County High, 1932-3, gymnasium; Walthamstow Commercial, 1932-3, assembly hall.

(*b*) Elementary Schools.—(1) Proposals for the year 1930-31 : Chingford, erection of senior school; Canvey Island, erection of infants' school; Clacton-on-Sea, erection of senior school; Dagenham, intermediate school; Epping, additional junior accommodation; Eastwood, additional accommodation; Grays, erection of intermediate school; Hornchurch, Malvern-road, erection of senior school; Hornchurch Village, additional accommodation; Laindon, site; Romford, erection of intermediate school; Romford, Albert-road Council, improvements; West Thurrock, additional accommodation; Wickford, enlargement of school; Witham, site. (2) Proposals for year 1931-32 : Brentwood, site for senior school; Chelmsford district, additional accommodation Earls Colne, improvements; Pitsea, site; Rainham, erection of senior school; Rochford, erection of senior school; Romford, erection of junior school; South Benfleet, additional accommodation; Witham, erection of junior school; Wivenhoe, improvements; Writtle, improvements. (3) Proposals for year 1932-33 : Aveley, additional accommodation; Braintree, additional accommodation; Brentwood, erection of senior school; Grays, erection of junior school; Harold Wood, additional accommodation; Laindon, additional accommodation; Pitsea, new senior school; Silver End, extensions to new school; Tilbury, additional accommodation or intermediate school; Upminster, additional accommodation.

Additional accommodation—assembly hall, library, and offices—are also to be provided at Maldon Grammar School during the present year.

A plot of land in Marshall's Park, Romford, has been purchased for the erection of a new intermediate school.

A practical instruction centre is to be erected at a cost of £3,241 at Halbutt-street Council School, Dagenham.

Edinburgh Housing and Building Exhibition.

We are informed that Mr. T. Percy Bentley, the organiser of the Edinburgh Housing and Building Exhibition, has been elected an affiliate member of the Edinburgh Architectural Association.

BUILDING TRADE WAGES IN SCOTLAND.*

THE following are the present rate of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur.

	Masons.	Bricklayers.	Carpenters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers—Masons'‡ Bricklayers'‡ Plasterers'†
Aberdeen	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Airdrie	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Alexandria	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Arbroath	1/6½	1/6½	1/6½	1/7½	1/6½	1/6½	1/5½	1/1
Ayr	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	1/2½
Bathgate	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/6½	1/2 to 1/3
Blairgowrie	1/7	1/7	1/7	1/7½	1/5	1/7	1/4	10d. to 1/-
Bo'ness	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Coatbridge	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Dumbarton	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Dumfries	1/6½	1/6½	1/6½	1/7½	1/6½	1/6½	1/6½	1/2
Dundee	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/3 †1/2½
Dunfermline	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/7½	‡1/2½ †1/2½
Edinburgh	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/3½ †1/2½
Falkirk	1/7½	1/7½	1/7	1/8	1/7	1/7	1/6½	1/2½
Fort William	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Galashiels	1/6½	1/7	1/6½	1/7	1/6½	1/6½	1/7	1/2
Glasgow	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Greenock	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/7	1/2½
Hamilton	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2
Hawick	1/7	1/7	1/7	1/7-1/7½	1/7	1/7	1/7	1/2½
Helensburgh	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/7	1/2½
Inverness	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/- to 1/2
Kilmarnock	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	1/2½
Kirkcaldy	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Kirkwall	1/5	1/5	1/4	1/5	1/5	1/4	1/4	1/-
Lanark	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Leith	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/3½ †1/2½
Motherwell	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Perth	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Stirling	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/7½	1/2½
Stirlingshire (Eastern District) ..	1/7½	1/9	1/7½	1/8½	1/7½	1/7½	1/8	1/2½
Wishaw	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½

* The information given in this table is copyright. The rates of wages in the various towns in England and Wales are given on page 312.

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	11	0
Add if in clay	" "	1	0
Add for every additional depth of 6 ft.	" "	0	6
Planking and strutting to trenches	per foot super	0	5
Do. to sides of excavation, including shoring	" "	1	0

CONCRETOR.

Portland cement concrete in foundation 1 to 6	per yard cube	38	0
Add if in underpinning in short lengths	" "	7	0
Add if in floors 6 in. thick	" "	3	3
Add if in beams	" "	3	9
Add if aggregate 1 : 2 : 4	" "	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	2	6

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	32	0	0
Add if in stocks	"	7	10	0
Add if in Staffordshire blues	"	22	0	0
Add if in Portland cement and sand	"	1	10	0

FACINGS.

Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0	1½

POINTING.

Neat flat struck or weathered joint	" "	0	0	3

ARCHES.

Extra only to the price of ordinary brickwork :—				
Fair external in half brick rings	" "	0	0	10
Axed in stocks	" "	0	1	9
Rubbed and gauged jointed in putty camber or segmental	" "	0	6	0

SUNDRIES.

Damp course in double course of slates breaking joint and bedded in Portland cement	" "	0	1	0
Setting ordinary register grates and stoves	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	"	4	15	0

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard super	4	6
Three-quarter-inch vertical damp course	" "	9	6
Three-quarter-inch on flats in two thicknesses	" "	6	3
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	" "	1	2

MASON.

York stone templates fixed	per foot cube	13	0
York stone sills fixed	" "	22	0
Bath stone and all labour fixed	" "	10	6
Beer stone and all labour fixed	" "	15	0
Portland stone fixed	" "	20	0

SLATER.

Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72	9
Do. 20 in. × 10 in. Do. Do.	"	80	9
Do. 24 in. × 12 in. Do. Do.	"	90	0

CARPENTER AND JOINER.

Fir framed in plates	per foot cube	5	0	
Do. joists	" "	5	6	
Do. roofs, floors and partitions	" "	6	0	
Do. trusses	" "	8	6	

		¾"	1"	1¼"	2"
Deal rough close boarding	per sq.	35/6	40/-	45/-	72/-

Flat centering for concrete floor, including struts or hangers	"	50	0	
Do. to beams	per ft. sup.	0	11	
Centre for arches	"	1	6	
Gutter boards and bearers	"	1	0	

FLOORING.

		¾"	1"	1¼"	1½"
Deal edges shot	per sq.	—	44/6	53/-	60/6
Do. tongued and grooved	"	—	49/-	57/6	65/-
Do. matchings	"	45/-	51/-	—	—
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/-	2/6

SASHES AND FRAMES.

		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	" "	2	1
Add for fitting and fixing	" "	0	3
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares, double hung, double hung with pulleys, lines and weights ; average size	" "	3	9

DOORS.

		1¼"	1½"	2"
Two-panel square framed	per ft. sup.	2/1	2/4	2/6
Four-panel Do. Do.	"	2/5	2/8	2/11
Two-panel moulded both sides	"	2/8	2/11	3/2
Four-panel Do. Do.	"	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

		s.	d.
Deal wrot moulded and rebated	per foot cube	14	0

		1"	1¼"	1½"
Plain deal jamb linings framed	per ft. sup.	1/7	1/8	1/11
Deal shelves and bearers	"	1/4	1/6	1/9
Add if cross-tongued	"	2d.	2d.	2d.

STAIRCASES.

	1"	1¼"	1½"	2"	2½"
Deal treads and risers in and including rough brackets	2/1	2/4	2/9	—.	—
Deal strings wrot on both sides and framed	1/8	2/-	2/2	2/8	—

		s.	d.
Housings for steps and risers	each	0	11
Deal balusters, 1 in. × 1¼ in.	per ft. run	0	9
Mahogany handrail : average, 3 in. × 3 in.	" "	6	0
Add if ramped	" "	12	0
Add if wreathed	" "	24	0

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	2/-
Sash fasteners	1 1½d.	Mortice locks	4/6
Casement fasteners	1/5	Patent spring hinges and letting into floor and making good	19/-
Casement stays	1/2		
Cupboard locks	1/5		

FOUNDER AND SMITH.

		s.	d.
Rolled steel joists	per cwt.	16	3
Plain compound girders	"	19	0
Do. stanchions	"	21	9
In roofwork	"	27	6

RAIN-WATER GOODS.

		3"	4"	5"	6"
Half-round plain rebated joints	ft. run	1/6	1/9	2/-	2/6
Ogee Do. Do.	"	1/9	2/-	2/6	3/3
Rain-water pipes with ears	"	1/9	2/7	—	—
Extra for shoes and bends	each	4/4	5/11	—	—
Do. stopped ends	"	1/11	2/4½	3/7	4/-
Do. nozzles for inlets	"	2/2	2/7	3/10	4/3

PLUMBER.

		s.	d.
Milled lead and laying in flashings and gutters	per cwt.	43	0
Do. Do. in flats	"	42	0
Extra labour and solder in coated cesspools	each	6	9
Welf joint	per ft. run	0	6
Soldered seam	" "	1	3
Copper nailing	" "	0	3

		½"	¾"	1"	1¼"	2"	4"
Drawn lead waste	per ft. run	1/2	1/9	2/-	3/4	4/-	—
Do. service	"	1/8	2/2	2/7	3/10	—	—
Do. soil	"	—	—	—	—	—	6/9
Bends in lead pipe	each	—	—	—	—	3/3	8/2
Soldered stop ends	"	1/2	1/8	2/1	2/10	3/6	—
Read lead joints	"	11d.	1/-	1/3	1/11	2/4	4/10
Wiped soldered joints	"	2/10	3/6	4/-	4/11	6/6	9/9
Lead traps and cleaning screws	"	—	—	—	14/7	19/6	—
Bib cocks and joints	"	6/4	9/7	15/4	41/-	—	—
Stop cocks and joints	"	15/4	17/2	25/8	64/-	—	—

PLASTERER.

			s.	d.
Render, float and set in lime and hair	per yard sup.		2	6
Do. Do. Sirapite	" "		2	9
Do. Do. Keen's	" "		4	0
Add saw lathing	" "		1	7
Add metal lathing	" "		2	6
(Not including hangers or runners, etc., for suspended ceilings.)				
Portland cement screed	" "		2	2
Do. plain face	" "		3	3
Mouldings in plaster	per 1 girth		0	1½
One-and-a-half granolithic paving	per yard sup.		5	6

GLAZIER.

		s.	d.
21-oz. sheet plain	per foot sup.	0	8½
26-oz. Do.	" "	1	0
Obscured sheet	" "	1	1
¼-in. rolled plate	" "	0	9
¼ in. rough rolled or cast plate	" "	0	10½
¼-in. wired cast plate	" "	1	4

PAINTER.

		s.	d.
Preparing and distempering, 2 coats	per yard sup.	0	9
Knotting and priming	" "	0	7
Plain painting, 1 coat	" "	0	9
Do. 2 coats	" "	1	2
Do. 3 coats	" "	1	9
Do. 4 coats	" "	2	4
Graining	" "	2	3
Varnishing twice	" "	1	9
Sizing	" "	0	3
Flatting	" "	0	7
Enamel	" "	1	1
Wax polishing	per foot sup.	0	6
French polishing	" "	1	2
Preparing for and hanging paper	per piece, 2/- to 4/-		

* These prices apply to *new buildings only*. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright.

NEWS ITEMS

Proposed Film Studios, Brighton.

Messrs. John Mowlem and Co., Ltd., have received the contract for levelling 14 acres of land in Whitehawk Valley, Brighton, for the British and Dominions Film Corporation, Ltd. Film producing studios, printing works, laboratories, offices, estimated to cost about £100,000, are planned. The company's architects are Messrs. E. Howard and Partners, St. James'-street, S.W.1.

New River Embankment, New York.

The construction of an embankment along the East River was proposed to the Board of Estimates of Manhattan Borough on January 28 by Mr. Julius Miller, the President of the Borough. The plan he asked the Board to approve is for a highway more than three miles long on the East Side of the city, from the lower tip of Manhattan Island to 54th-street. The new street, Mr. Miller said, would serve as an express highway and would relieve congestion in the city.

Publishers' Catalogue.

Messrs. B. T. Batsford's new catalogue, of which we have received a copy, contains descriptions of over 480 books on furniture, decoration, handicrafts, architecture, building, engineering, ornamental and fine art, applied science, social life, etc., and includes all the firm's recent and forthcoming publications. In addition it is illustrated by 32 pages of photographic reproductions taken from the books, and has an attractive cover design by Miss Freda Lingstrom.

Dangerous Occurrences Notification Order.

In pursuance of Section 5 of the Notice of Accidents Act, 1906, a Home Office Order has been issued extending the provisions of the Act requiring notice of accidents in factories and workshops to be given to an Inspector to the following classes of occurrences in a factory or workshop, whether personal injury or disablement is caused or not :—All cases of—

1. Bursting of a revolving vessel, wheel, grindstone or grinding wheel moved by mechanical power.

2. Breaking of a rope, chain, or other appliance used in raising or lowering persons or goods by aid of mechanical power.

3. Explosion or fire causing damage to the structure of any room or place in which persons are employed, or to any machine or plant contained therein, and resulting in the complete suspension of ordinary work in such room or place or stoppage of machinery or plant for not less than five hours, where such explosion or fire is due to (i) the ignition of dust, gas or vapour, or (ii) the ignition of celluloid or substances composed wholly or in part of celluloid, or (iii) electrical short circuit, or failure of electrical apparatus.

4. Explosion or fire not included in paragraph 3 affecting any room in which persons are employed and causing complete suspension of ordinary work therein for not less than 24 hours.

TENDERS

* Denotes *accepted.*
† Denotes *provisionally accepted.*
‡ Denotes *recommended for acceptance.*
§ Denotes *accepted subject to modifications.*

Aberdeen.—Work in connection with the clearance and levelling of the site for the schools at Hilton and the excavations and concrete foundations, for the E.C. :—

*Clark & Chapman	£3,774 15 2

Altrincham.—New extensions at the works of Broadheath, for Messrs. Churchill Machine Tool Co., Ltd. Messrs. Mortimore Lyons & Co., civil engineers and architects, 17, St. Ann's-square, Manchester :—

Building—
*W. Thorpe & Sons, Manchester.
Patent Glazing and plumbing—
*J. A. Macrea & Son, Ltd., Manchester.

Amblecote.—24 non-parlour type houses with new roads, sewers, paths and fencing, at Vicarage-road, for the U.D.C. Messrs. Webb & Gray, architects, Dudley and Stourbridge :—
*W. H. Rogers, Willenhall, Staffs.

Armley.—Extensions to the Malleable Boot Protector Foundry, for Messrs. Blakeys, Ltd. Messrs. Carby, Hall & Sons, architects, Park-row, Leeds :—
*Hy. Atkinson & Sons, Ltd.

Arnold, Notts.—New church in Thackeray's-lane, for Fr. P. J. Power. Messrs. Fosbrooke & Bedinfield, architects, 1, Museum-square, Leicester :—
F. H. Bradford, Leicester.

Bargoed, Glam.—Erection of a Mining Institute at Bargoed, for the Glamorgan Education Committee. Mr. D. Pugh Jones, F.R.I.B.A., F.S.I., County Architect, County Hall, Cardiff :—

*Evan James, Ystradmynach	£5,437 1 6

Bexhill.—Erection of lavatories, grandstand, etc., at Polegrove Pavilion, for the C.B. Borough Engineer, Town Hall :—

F. Banks, Bexhill	£4,679 7
H. & J. Taylor, Hastings	4,640 0
Harrison-Smith Buildings, Ltd., Birmingham	4,635 10
J. Bodle, Ltd., Bexhill	4,445 0
A. Radcliffe, Hastings	4,424 0
C. E. Skinner & Son, Ltd., Chatham	4,353 0
Norman Smith & Son, Maidstone	4,200 0
Hayhurst & Wright, Hastings	4,172 0
R. Cook & Sons, Crawley	4,064 0
W. J. Simms, Sons & Cooke, Ltd., Nottingham	3,850 0
*Peerless, Dennis & Co., Eastbourne	3,765 0

Blackpool.—Construction of conveniences and bandstand in Stanley-park, for the C.B. Messrs. Thomas H. Mawson & Son, architects, High-st. House, Lancaster :—

Lavatory block—
*W. Eaves & Co., Blackpool.
Bandstand—
*H. Vickers, Blackpool.

Bradford.—New club headquarters on Bolton-road, for the North Ward Conservative Association. Messrs. James Young & Co., architects, Lloyds Bank Chambers, Hustlergate, Bradford :—
*Edgar Gadie, Bradford.

Broxbourne (Herts.).—Laying sewers in Spital Brook. Mr. H. J. Jackson, Surveyor :—

Rowman & Mahon	£1,354
W. Pavey & Sons	898
G. Bell & Sons	787
F. Hitch & Co.	786
J. Oram & Sons	725
Crook Bros.	712
W. & C. French	690
A. M. Turner & Co.	686
L. P. Works	664
Lee & Silvester	633

Bowden.—Alterations and extensions to "Parklands," for Mr. W. H. Berry. Mr. Herbert Wade, architect, 2, Birley-street, Blackpool :—
*Dryland & Preston, Littleborough & Blackpool.

Chadwell Heath.—24 lock-up garages in Green-lane, for J. G. Tilley. Mr. Edward Meredith, A.R.I.B.A., architect, 7, Goodmayes-road, Goodmayes :—

Baker, Hammond & Laver, Rainham	£2,168
F. W. Romain & Sons, Chadwell Heath	1,575
Haines & Warwick, Ltd., Seven Kings	1,549
*Stedman Bros., Ilford	1,482

Coventry.—Branch premises for Lloyds Bank, Ltd., on the Radford Housing estate. Mr. T. D. Griffiths, architect, Hertford-street :—
*J. G. Gray, Coventry.

Dagenham.—Block of shops in Oxlow-lane, for Mr. H. G. Odell. Mr. Edward Meredith, A.R.I.B.A., architect, 7, Goodmayes-road, Goodmayes :—

T. N. Hughes, Ltd., Ilford	£7,800
G. H. Carter, Ltd., London, N.16	7,750
W. J. Cearns, Stratford, E.15	7,251
J. Eaton & Sons, Chelmsford	6,589
*Stedman Bros., Ilford	6,350

Dagenham.—25 lock-up garages at Heathway, for Mr. F. W. Bowerman. Mr. Edward Meredith, A.R.I.B.A., architect, 7, Goodmayes-road, Goodmayes :—

Baker, Hammond & Laver, Rainham	£1,600
Holland Bros., Chadwell Heath	1,560
*Stedman Bros., Ilford	1,560

Doncaster.—10 houses on the Melton-hill site, for the Barnburgh Estates Co., Ltd. :—
*Leadley, Limited, Askern, near Doncaster.

Dumfries.—Construction of a reservoir of about 340,000 gallons capacity, with earthen embankment and puddle wall, and the supplying, laying, and jointing of about 1,255 lineal yards of 4-inch diameter cast-iron pipes and relative accessory works, at Thornhill, for C.C. Mr. W. C. Easton, chartered civil engineer, 183, West George-street, Glasgow :—
*F. Flaherty.

Epsom.—6 pairs of non-parlour type houses at Hook-road, for the U.D.C. Messrs. A. C. Williams & Pettett, architects, Reid's-building, Ashley-road :—

W. F. Goodchild, London	£7,612 0 0
Uden & Co., Epsom	7,470 10 0
A. E. Wilkinson, Ltd., Carshalton	7,428 17 6
Henry Taylor & Son, Epsom	7,277 0 0
W. Taylor, Epsom	7,194 9 6
R. L. Coombs, London	7,133 0 0
R. Mansell, Croydon	6,462 10 0
Frank Day, Wimbledon Park	6,420 0 0
H. H. & F. Roll, Epsom	6,361 0 0
H. Bacon & Son, Ltd., Coulsdon	6,360 0 0
Lowry Estates, Ltd., Carshalton	6,354 0 0
Lawes Cherry & Co., Ltd., London	6,207 0 0
Durnfords, Ltd., Claygate	6,201 0 0
*Thorogood Bros. & Son, Tolworth	6,142 0 0
Idwal Davies, Upper Norwood	6,075 0 0
D. Garner & Sons, Sutton	5,495 0 0
Edwards & Co., Barking	——

(Subject to Ministry of Health sanction.)

Everton.—Rebuilding St. Timothy's Church, Rokeby-street. Messrs. Willink & Dod, architects, Cunard Buildings, Liverpool :—
*J. Duthie & Son, Liverpool.

Filey.—72 non-parlour type houses and construction of necessary street works and sewers in connection therewith, for the U.D.C. Mr. H. Cleafor Cowen, architect, engineer and surveyor :—

William Ward, Rothwell, nr. Leeds	£38,216 0 0
A. Braithwaite & Co., Ltd., London	35,632 14 6
Anthony Lyons, Norton, Malton	34,055 0 0
B. Fell & Sons, Filey	33,169 6 5
H. E. Pitt, Ltd., Sunderland	32,896 0 0
W. J. & R. Turnbull, Leeds	32,865 6 4
Walter Firth, Ltd., Doncaster	31,455 13 0
L. J. Gallagher & Sons, Castleford	30,822 0 0
*Sawdon Bros., Carlton-road, Filey	30,739 0 0
John Sawdon, Bridlington	30,168 0 0
James Garside, Scarborough	30,031 0 0

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84, Above Bar, Southampton.

Glencairn.—Small National school at Glencairn, on road from Ballyduff to Lismore. Father Prendergast, P.P.:—

P. Joyce, Acres & Fermoy £1,490
J. Coffey, Middleton, Co. Cork 1,250
(No tender accepted.)

Godalming.—Houses on the Binscombe-lane housing scheme, for the R.D.C. Mr. G. Bertram Hartree, F.S.I., M.Inst.C.E., Borough Surveyor and Architect:—

2 blocks of 4 (per block)—
A. H. W. Smith, Godalming £1,696
Newman & Sons, Horsham 1,560
Guild of Builders, Guildford 1,495
G. Mayers, Godalming 1,408
*Enticknap Bros., Wormley 1,380
Architect's estimate 1,452

Received too late—
Blackwell & Meyers, Bexleyheath £1,495 10

4 South type pairs (per pair)—
A. H. W. Smith, Godalming £884
Newman & Sons, Horsham 840
Guild of Builders, Guildford 792
G. Mayers, Godalming 730
*Enticknap Bros., Wormley 720
Architect's estimate 752

Received too late—
Blackwell & Meyers, Bexleyheath ... £765 18

4 North type pairs (per pair)—
A. H. W. Smith, Godalming £884
Newman & Sons, Horsham 860
G. Mayers, Godalming 775
Enticknap Bros., Wormley 760
*Guild of Builders, Guildford 749
Architect's estimate 730

Received too late—
Blackwell & Meyers, Bexleyheath ... £723 18

Greenford.—Alterations and additions to the "Railway Hotel," public house, for Messrs. Watney, Combe, Reid & Co., Ltd., Stag Brewery, Westminster, S.W. Messrs. F. J. Fisher & Son, architects, 35, John-street, Bedford-row, W.C.1. Mr. Ernest E. Richardson, quantity surveyor, 35, John-street, W.C.1:—

*A & B. Hanson, Ltd., Southall £7,284

Guildford.—New nurses' home at the County Hospital, for the Royal Surrey County Hospital. Messrs. Adams, Holden & Pearson, FFF.R.I.B.A., architects, 9, Knightsbridge, S.W.1. Quantity surveyor, Mr. F. J. Hodgson, 201, High-street, Guildford:—

Marden & Ball Co. £9,305 2
Swayne & Sons, Ltd. 9,292 0
Goddard & Sons 9,274 0
Stanley Ellis, Ltd. 9,136 0
Mills & Sons 8,985 0
Tribe & Robinson 8,983 0
Higlett & Hammond 8,897 0
Warren & Son 8,680 0
R. Wood & Son 8,690 0
Kemp, Stroud & Co. 8,669 14
Chapman, Lowry & Puttick, Ltd. 8,576 0
Milton & Sons 8,496 0
Bunning & Fitton Adams, Ltd. ... 8,477 0
*David Fry & Sons 8,437 0

Halifax.—Filtration installation at the Ogden reservoir, for the T.C.:—

‡Paterson Engineering Co., Ltd., London £38,370

Kenton.—New primary school at Kenton, for the Middlesex C.C. Mr. H. G. Crothall, F.R.I.B.A., County Architect:—

C. J. Newby & Bros., Southgate £15,027 0
A. E. A. Prowting, Ltd., Ruislip 14,701 2
W. E. Greenwood & Son, Ltd., Harlesden 14,645 0
A. Monk, Lower Edmonton 14,430 0
W. Lawrence & Son, Ltd., London 14,324 0
G. Godson & Sons, Tottenham ... 14,200 0
Y. J. Lovell & Son, Gerrards Cross 14,166 0
A. & B. Hanson, Ltd., Southall ... 14,150 0
G. Challis & Co., Ltd., Brentford 13,996 0
W. S. Try, Uxbridge 13,915 4
H. Knight & Son, Tottenham 13,871 0
*J. Stewart & Sons, Tottenham ... 13,817 0

Lancaster.—An office and residence, Chapel-street, for T. Ireland & Sons, Ltd. Mr. R. W. Jackson, architect and surveyor, 43, Church-street:—

*W. E. J. Peill, Lancaster.

Leeds.—For erection of 76 houses, type A3, and 6 houses on the Hawkesworth estate, for the Corporation:—

*A. Braithwaite & Co., Ltd., Leeds... £34,039

Leeds.—For reconstruction of warehouse into shops and offices at Britannia-street and Wellington-street. Messrs. A. & F. Mosleys, Ltd., Architects:—

*Chas Higgins.

Lowes.—Alterations and additions to Malling House, for Sir George Boughey. Mr. H. T. B. Barnard, A.R.I.B.A., architect, of London:—

*Ringmer Building Works, Ringmer, Sussex.

Liverpool.—Boundary wall and railings at Dovedale-rd. Council school, for the T.C. Mr. Albert D. Jenkins, F.S.I., land steward and surveyor, Municipal Buildings, Liverpool:—

*Rimmer Bros., Liverpool.

London.—Extension of the platform at the Streatham Bath Hall, for the Wandsworth B.C.:—

*Walter Withers & Son, Ltd. £315

London.—Rebuilding of the premises at 44-45, Fleet-street, E.C. Mr. M. K. Matthews, chartered surveyor, 78, Tottenham Court-road, W.1, architect. Messrs. Waggett & Bradford, 12, Regent-street, S.W.1, quantity surveyors:—

Steelwork—
*E Webb & Co., Charterhouse-street, E.C.

Stonework—
*Empire Stone Co., Ltd., 231, Strand, W.C.

Reinforced concrete floors—
*British Reinforced Concrete Engineering Co., Ltd., Stafford.

Asphalt—
*Permanite, Ltd., Old Ford-road, E.

London (Acton).—New colour factory, laboratories, etc., in Victoria-road, North Acton, W., for Messrs. Colour Photographs, Ltd., Duke-street, W.1. Mr. John Batty, A.R.I.B.A., architect, 51, Swinburne-road, Putney, S.W.15. Quantity surveyors, Messrs. Evans & Lynd, Dyers-buildings, High Holborn, W.C.:—

Building work—
*Dix (Builders), Ltd., 24, Eccleston-street, W.1 ..... £18,060

Steelwork—
*Redpath, Brown & Co., Ltd., London
*Power's and Deane Ransome's, Ltd., Cubitt Town.

London (Fulham).—Rebuilding of the "Greyhound" public house in Greyhound-lane, S.W., for Messrs. Watney, Combe, Reid & Co., Ltd. Messrs. F. J. Fisher & Son, architects, 35, John-street, Bedford-row, W.C.1. Mr. E. Richardson, quantity surveyor, 35, John-street, W.C.1:—

F. & H. F. Higgs, Ltd., Herne Hill £19,984
Sims & Russell, Westminster 19,723
F. G. Minter, Ltd., Putney 19,645
Simmons Bros., Putney Heath 19,585
John Greenwood, Ltd., London 18,770
Dove Bros., Islington 18,625
*Truett & Steel, Ltd., Thornton Heath 18,175

London (Ladywell).—Erection of public conveniences in the recreation ground, for the L.C.C.:—

*T. Brown & Son £612

London.—New premises in Dacre-street, Westminster, S.W., for Messrs. B. J. Hall & Co., Ltd., Broadway, S.W.1. Mr. T. Brammell Daniel, F.R.I.B.A., 36, Victoria-street, S.W.1, architect. Messrs. Franklin & Andrews, 25, Ludgate-hill, E.C.4, quantity surveyors:—

John Mowlem & Co., Ltd., Westminster £51,981
James Carmichael (Contractors), Ltd., Wandsworth 51,250
Foundation Co., Ltd., Kingsway, W.C. 50,913
Holloway Bros. (London), Ltd., Westminster 50,615
Holland & Hannen and Cubitts, Ltd. London 49,542
Tro'lope & Colls, Ltd., London 49,396
F. G. Minter, Ltd., Putney 49,191
G. E. Wallis & Sons, Ltd., Maidstone 49,106
Foster & Dicksee, Ltd., London 48,968
W. H. Lorden & Son, Ltd., Wandsworth 48,814
Higgs & Hill, Ltd., Lambeth 48,363

London (Tabard-garden).—Erection of service buildings, shelters, conveniences, etc., for the L.C.C.:—

*Triggs & Co., Ltd. £868

London (Whitechapel).—Additional story at factory premises, Whitechapel, E.1, for Messrs. Godfrey Phillips, Ltd., tobacco manufacturers. Mr. W. Gilbee Scott, F.R.I.B.A., 25, Bedford-row, W.C.1, architect:—

*L. & W. Whitehead, Ltd., Clapham-road, S.W.9 ..... £3,084

Long Grove.—Erection of cattle shed with exercising yard for young cattle, for the L.C.C.:—

*H. H. & F. Roll, Epsom £237 12

Manchester.—New branch premises in Wilmslow-rd., Didsbury, for the Midland Bank, Limited. Mr. John Knight, F.R.I.B.A., architect, 5, Cross-street, Manchester:—

*Whittaker Whitworth, Ltd., Oldham.

Mansfield.—New school for the United Methodist Church Trustees. Messrs. George Baines & Son, FF.R.I.B.A., architects, 121, Victoria-street, S.W.1:—

*R. Moore & Son, Stockwall-gate £4,319

Northampton.—Works in connection with the Kingsthorpe cemetery, for the C.B.:—

Unclimbable Iron Fence—
*Bayliss Jones & Bayliss (Wolverhampton).

Stone Wall and Fence—
*Chowns, Ltd.

Ornamental Iron Fence adjoining the Road—
*Northampton Foundry Co., Ltd.

Nottingham.—New branch premises on Woodside-road, Lenton Abbey Estate, for the Nottingham Co-operative Society, Ltd. Mr. A. Longmate, architect, 82, Highbury-road, Nottingham:—

*J. H. Brough & Co., Beeston, Notts.

Plymouth.—Alterations to 30, High-street, Stonehouse, for conversion into a clinic, for the E.C. Mr. J. Wibberley, City Engineer, Surveyor and Architect:—

*C. Lobb & Co., Victoria Buildings, Queen-street, Plymouth.

Plymouth.—Repairs, also painting, etc., at pontoon at Pottery Quay, for the T.C. Mr. J. Wibberley, City Engineer, Surveyor and Architect:—

*Rogers & Co., Cremyll Shipyard, near Plymouth.

Portsmouth.—Alterations to "Richmond Hotel." Messrs. A. E. Cogswell & Sons, chartered architects and surveyors, Portsmouth:—

Jordan, Ltd., Southsea £282 0 0
John Lay & Co., Portsmouth 248 0 0
F. Privett, Southsea 245 0 0
L. Hoad, Southsea 237 0 0
*A. E. Porter & Son, Portsmouth 204 19 9

Preston.—Instruction centre in March-lane, for the C.B. Mr. W. Platt, Borough Engineer and Surveyor:—

*Pius A. Baines & Son, Preston.

Preston.—Infants' school in Ribbleton-avenue, for the C.B. Mr. W. Platt, Borough Engineer and Surveyor:—

*Pius A. Baines & Son, Preston.

Rainham.—New shop and house for Mrs. Chaffin. Mr. Edward Meredith, A.R.I.B.A., M.I.Struct.E., 7, Goodmayes-road, Goodmayes, Essex:—

Raker, Hammond & Laver, Rainham £1,580
Stedman Bros., Ilford 1,445
*Holland Bros., Chadwell Heath 1,285

Reigate.—Police and Fire Station and Baths, at Redhill, for the Reigate Borough Council. Town Clerk, Municipal Buildings, Reigate, Surrey. Mr. Joseph Sunlight, architect, 4, St. Anne's-square, Manchester:—

Hoskings & Pond, Newbury £28,639
Rowland Bros., Horsham 27,799
C. Miskin & Sons, Ltd., London 26,996
G. N. Hitchcox, Caterham 32,903
Robert Mansell, Croydon 27,997
G. H. Denne & Son, London 29,480
J. Crewdson, Horley 29,800
A. Roberts & Co., Ltd., Kensington 29,327
Gilbert Bros., Broadstairs 32,222
James Bodle, Ltd., Eastbourne 28,176
W. P. Banks, Ltd., Sevenoaks 27,521
H. G. Waters, Redhill 29,477
Pink & Oram, Merstham 28,613
W. H. Brown (Leatherhead), Ltd., Dorking 31,051
E. H. Cummins & Co., Ltd., Dorking 31,553
H. & F. Roll, Epsom 27,689
Burnand & Pickett, Ltd., Wallington 27,396
G. Martin, Redhill 31,340
Atkinson & Potter Bros., Reigate ... 29,387
*The Building & Public Works Construction Co., Ltd., Swindon, Wilts 25,949

St. Alban.—59 cottages at Sandridge-road site, for the T.C. Mr. F. T. Negus, City Engineer and Surveyor, 38, St. Peter's-street:—

Lawes, Cherry & Co., Ltd., London £26,420
J. T. Bushell & Sons, St. Albans 23,975
James & Woodworth, Cardiff 23,725
Walter Jones & Sons, Ltd., Westminster 23,610
Freeman Bros., Harpenden 23,244
The Corolite Construction, Ltd., London 23,029
C. Miskin & Sons, St. Albans 22,887
Franklin & Co. (Erith), Ltd., Erith 22,209
Blackwell & Meyer, Bexley Heath, Kent 21,987
Harvey & Webster, Harpenden 21,923
H. H. Parsons, St. Albans 21,447
Winter & Ward, Harpenden 21,328
Edie Towers & Co., Wolverhampton 20,549
*Grosvenor Construction Co., Ltd., Westminster 20,180

Salford.—Installation of electric light at Trafford-road girls' school, for City Council:—

‡J. Price & Sons, Higher Broughton £196 3 6

Southampton.—New wing (showrooms, etc.), at the premises of Messrs. Plummer Roddis, Ltd., drapers. Messrs. George Baines & Son, FF.R.I.B.A., architects, 121, Victoria-street, Westminster, S.W.1:—

Building work—
*J. J. Udall Building Company, 36, Carlton-place £16,412

Steelwork—
*Archibald D. Dawnay & Sons, Ltd., Battersea, S.W.

Sawston.—Erection of village college, for the Cambs. County Council. The County Architect, Town Hall, Cambridge:—

*Cope Bros., Duxford £13,062 17 2

Swansea.—Catholic elementary school for 880 children, for Managers. Mr. W. C. Mangan, architect, 18, Guildhall-street, Preston:—

Evan Thomas & Sons, Neath £26,299
Arthur Seaton, Pontypridd 25,344
Mackenna, Ltd., Swansea 24,500
D. Jenkins, Ltd., Swansea 24,490
Foster & Dicksee, Ltd., Rugby 24,353
Lloyd Brothers, Ltd., Swansea 23,750
Henry Billings & Sons, Swansea ... 23,000
James Brothers, Swansea 22,160
Bennett Brothers, Swansea 21,995
Charles Tyler, Swansea 21,900
Waring, Cole & Waring, Neath 21,794
Edward Rich & Son, Swansea 21,277
Griffith Davies & Co., Swansea 20,900
Richard Jones, Caerphilly 19,970
Thomas Richards, Swansea 19,891
Reynon & Thomas, Mumbles 19,899
*J. & F. Weaver, Swansea 19,500

Tavistock.—(*a*) 4 houses at Princetown, and (*b*) 6 at Buckland Monachorum, for the R.D.C. Mr. T. H. Harris, architect, Council Offices:—

(*a*)—

J. L. Richards & Son, Bere Alston	£1,940
C. B. James, Callington	1,888
Universal Housing Co., Rickmansworth	1,844
*Halfyard Bros., Princetown	1,790
Phillips & Co., Callington	1,748

(*b*)—

C. B. James, Callington	£2,814
Universal Housing Co., Rickmansworth	2,640
R. Toop, Horrabridge	2,532
Phillips & Co., Callington	2,460
*J. L. Richards & Son, Bere Alston	2,382

Thames Ditton.—Rebuilding of the "Plough and Harrow," for Hodgson's Kingston Brewery, Ltd. Messrs. Yetts, Sturdy & Usher, FF.R.I.B.A., architects, 34, Gordon-square, W.C.1:—

F. & H. F. Higgs, Ltd., Herne-hill	£5,788
Courtney & Fairbairn, Ltd., Peckham	5,775
W. H. Brown (Leatherhead), Ltd., Leatherhead	5,705
S. Ellis, Guildford	5,661
Limpus & Co., Kingston Hill	5,649
*W. H. Gase & Sons, Ltd., Kingston	5,483

Thornbury.—10 houses, for the R.D.C.:—

*F. Ranger, Yate	£2,976

Thurnscoe.—Conversion of privies into water closets, in respect of property 30-44, High-street, and 1-11, Togo-buildings, Thurnscoe, for the U.D.C.:—

E. Adams	£227 14 0
G. Clarke & Sons	198 4 0
E. Tabor	198 0 0
Shepard Bros.	197 0 3
H. Gough	189 0 0
E. Thompson	180 0 0
*C. Wilson & Sons	171 0 0
H. Mortimer	169 0 0

Whitby.—Greenhouse in Council's Nursery, for the U.D.C. Mr. J. R. Seward, A.M.I.C.E., Council Offices, Whitby:—

Richardson & Co., Ltd., Darlington	£246 6
Braim & Sons, Whitby	165 10
A. Palframan & Son, Whitby	163 4
H. D. Stevenson, Whitby	159 19
W. Nelson & Sons, Whitby	154 0
J. H. Howard, Whitby	150 17
W. Poole, Whitby	150 0
B. Smith & Sons, Whitby	147 8
Akeroyd & Gatenby, Whitby	142 5
C. Jackson, Whitby	142 0
*J. Kidd & Son, Whitby	141 15

Wigton.—Alterations and additions to buildings formerly a jam factory, for the British Netherlands Artificial Silk Co., Ltd., Trafalgar House, Waterloo-place, S.W.1. Mynheer Wegire, architect, Wassenvaar, The Hague, Holland:—

*Caton & Duckworth, Blackburn.

Wigton.—Laying gravitation water supply in 10 N.W. Cumberland parishes, for the R.D.C.:—

*D. Thomson & Son, Carlisle £52,577

Winchelsea (Sussex).—Private residence, chauffeur's lodge and garage, for Mr. H. Frisby. Messrs. Tubbs & Messer, architects, of London:—

*Ringmer Building Works.

Wolverhampton.—Engineering work at the Technical College, for the E.C.:—

*H. Willock & Co., Wolverhampton £22,152

Wolverhampton.—New second and third blocks at Oldfallings-lane, Low Hill, for the E.C. Mr. H. B. Robinson, Surveyor, Town Hall:—

‡F. & E. V. Linford, Cannock, Staffs £17,991

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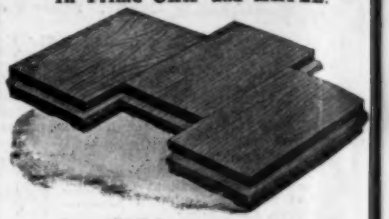
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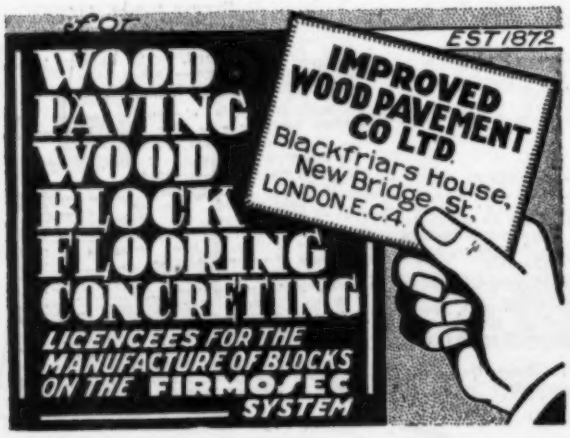
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